



THE DOCTRINE OF BEING IN HEGEL'S SCIENCE OF LOGIC

A Critical Commentary



MEHMET TABAK



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This book is dedicated to my mother, Gülten Tabak.

CONTENTS

1	Introduction	1
Part I Determinateness (Quality)		
2	Being	37
3	Determinate Being	51
4	Being-for-Itself	101
Part II Magnitude (Quantity)		
5	Quantity	129
6	Quantum	137
7	The Quantitative Relation	155

Part III Measure

8	Specific Quantity	169
9	Real Measure	189
10	The Becoming of Essence	201
	Index	215

Introduction

GENERAL INTRODUCTION

Georg W. F. Hegel (1770–1831) is one of the most influential philosophers in the history of philosophy. However, his influence has not always been positive. As one author puts it, “Hegel is one of the most lionized and most vilified philosophers.”¹ His *Science of Logic* (hereafter *SL*), which is rightly regarded as the “keystone” of his philosophy,² has met the same fate. It is vilified by some as a “bombastic and mystifying cant,” as bereft of “rational argument.”³ It is lionized by others as “the most important work on metaphysics in history,”⁴ or even “a great and truly unparalleled masterpiece of philosophy.”⁵

However, there exists a general consensus on Hegel’s philosophy. “In the realm of great philosophy,” writes Theodor Adorno, “Hegel is no doubt the only one with whom at times one literally does not know and cannot conclusively determine what is being talked about.”⁶ As Robert B. Pippin notes, “Hegel seems to be in the impossible position of being both extraordinarily influential and almost completely inaccessible.” In other words, “it is widely believed that no one knows what he is talking about.”⁷ This assessment is especially applicable to *SL*. In this regard, Justus Hartnack informs us that “*Science of Logic* is by almost universal consent regarded as his most difficult work.”⁸ Consequently, as Stephen Houlgate notes, *SL* is “one Hegelian text that still languishes in particular obscurity ... [F]or most people today, and even for many Hegelians, the *Logic* remains both figuratively and literally a

firmly closed book.”⁹ All these authors, as well as others, have tried to make *SL* more accessible.

Thanks to the steadily growing body of literature on *SL*, we are now in a better position to decipher its secrets.¹⁰ However, so it seems, every new commentary reminds us of the same persisting problem without overcoming it: *SL* has not been sufficiently interpreted or understood.¹¹ One important general problem in this regard was noted by Friedrich Schelling in his 1841 Berlin lectures: “Those who praised ... [Hegel] most fervently always removed a few platitudes and slogans, [and] rarely spoke of specifics.”¹² Pippin similarly laments that Hegel scholars all too often interpret *SL* through its “conclusions,” and ignore the “speculative arguments used to support those conclusions.”¹³

The importance of speculative arguments and deductions to Hegel cannot be overstated. Indeed, according to Hegel, what makes his logic “scientific” is that its conclusions are not presupposed; instead, they issue immanently and necessarily from their more abstract premises. In other words, “Hegel ... assumes that there ... [is] a *single* ... route leading up to Systematic Science ..., a route in which there are absolutely not arbitrary steps.”¹⁴ This means that Hegel regards every step of *SL* as necessary, and every conclusion as the necessary result of these steps.¹⁵ In other words, as Søren Kierkegaard rightly observes, for Hegel, this “method is supposed to be everything ... its absence at this or that point cannot be a matter of indifference... Hegel has himself staked his whole reputation on this matter of the method.”¹⁶ If so, an adequate interpretation of *SL* must account for just about every “logical” step Hegel takes in it.¹⁷

Only a few scholars have attempted to provide a sufficiently detailed account of *SL*. Generally speaking, such accounts are too uncritical. On the other hand, the existing critical accounts are bereft of detail. In my view, *SL* cannot be adequately understood—much less explained to others—uncritically, for the “logical” steps Hegel takes therein are often very problematic.¹⁸ The main aim of this study is to provide a detailed and critical account of *SL*.¹⁹

Clearly, this study is also inadequate in an important sense, for it only comments on “The Doctrine of Being.” The main reason for this inadequacy is that, as Houlgate rightly notes, “if one takes on any more, there is a great danger that one will begin to skip individual arguments ... But that would be to miss what is most important and most exciting in Hegel’s text: the *details*.”²⁰ This “danger,” it goes without saying, is

also related to the space limitation imposed by the publisher. However, although this partial account of *SL* cannot be a substitute for the whole thing, Hegel regarded “The Doctrine of Being” as “a totality of determinations and a presentation of the Absolute” (*EL* 135).²¹ For this reason, I regard “The Doctrine of Being” as an adequate subject matter for a single volume.

Given that Hegel thinks his system of logic develops immanently, it is necessary to analyze “The Doctrine of Being” in the same sequence in which he presents it in *SL*. This is what I do in the ensuing nine chapters of this study. To give a schematic outline of these chapters, “The Doctrine of Being” consists of three main parts: “Determinateness (Quality),” “Magnitude (Quantity),” and “Measure.” Each major part is further divided into three chapters, thus giving us nine chapters in total. The three chapters of “Quality” have the following titles: “Being,” “Determinate Being,” and “Being-for-itself.” These chapters are discussed in my Chaps. 2, 3, and 4, respectively. Hegel divides “Quantity” into the following chapters: “Quantity,” “Quantum,” and “The Quantitative Relation.” These three chapters correspond to my Chaps. 5, 6, and 7. The three chapters included in “Measure” are: “Specific Quantity,” “Real Measure,” and “The Becoming of Essence.” I discuss them in my Chaps. 8, 9, and 10.

The original source I use throughout this study for “The Doctrine of Being” is (1) G. W. F. Hegel, *Wissenschaft der Logik. Erster Theil: Die Objektive Logik. Erste Abtheilung: Die Lehre Vom Seyn*, ed. Leopold Von Henning (Berlin: Duncker and Humblot 1833). However, for the convenience of the readers, I also cite two additional versions of *SL*: (2) G. W. Hegel, *Wissenschaft der Logik I. Erster Teil: Die Objektive Logik. Erstes Buch*, ed. Eva Moldenhauer und Karl M. Michel (Frankfurt am Main: Suhrkamp Verlag 1969); and (3) *Hegel's Science of Logic*, trans. Arnold V. Miller (Amherst, NY: Humanity Books 1969). For example, page 27 of (1) coincides with page 35 of (2) and page 43 of (3); they are collectively, and in the same order, cited as (*SL* 27/35/43). I have benefitted significantly from the Miller translation and the following two translations of *Wissenschaft der Logik: Hegel's Science of Logic*, vol. 1, trans. W. H. Johnston and L. G. Struthers (London: George. Allen and Unwin 1929); *The Science of Logic*, trans. George di Giovanni (Cambridge, UK: Cambridge University Press 2010).

In agreement with Houlgate, I maintain in this book that Hegel's logic “should be understood at once as [1] a presuppositionless analysis of

the basic categories of thought and as [2] a post-Kantian ontology [or metaphysics].”²² To qualify, I agree that Hegel thought of his logic in these two related terms but, in my view, failed to make a convincing case for such logic and ontology. His failure in this regard will be observed throughout this study. I attempt to explain what (1) and (2) entail, in the reverse order, in the remaining two sections of this chapter.

LOGIC AS METAPHYSICS

Hegel’s Description of his Logic as Metaphysics

One school of thought claims that Hegel’s logic is *also* metaphysics.²³ Another school denies this.²⁴ In my view, Hegel undeniably claims that his logic is (also) metaphysics.²⁵ Indeed, given that he assumes the identity of being and thought, this conclusion seems unavoidable. Overall, so I claim, Hegel believed that his system of logic describes the underlying truth of being.

Hegel defines pure logic as thought thinking itself. “Thinking as an *activity* is the *active* universal [or the concept]” (EL 49). Thus, on the one hand, logic is simply the activity of the universal, the activity through which the concept demonstrates itself in its totality. However, following Aristotle, Hegel also maintains that this “purposive activity” is also “*the nature of a thing*.”²⁶ Therefore, “the universal—as the [origin and] product of this activity—contains the value of *matter* [or objects],” that is, it expresses “what is *essential, inner, true*” of these objects themselves (EL 52). Thus, “in thinking about things, we always seek what is fixed, persisting, and inwardly determined, and what governs [or grounds] the particular,” which ground is “the universal”—namely, that which “is essential and true” of the “nature of the object” (EL 53–4). This coincides with Hegel’s definition of metaphysics as the “science” that regards “thought-determinations as the *fundamental determinations of things*” (EL 66). Thus, according to Hegel, the science of logic “coincides with *metaphysics*,” for it is “the science of things grasped in *thoughts* that ... express the *essentialities* of the *things*.” More generally stated, “the Logical is to be sought in a system of thought-determinations in which the antithesis between subjective and objective (in its usual meaning) disappears” (EL 56).

The older metaphysics,²⁷ says Hegel, “was intended to be the scientific construction of the world in terms of ... the *determinations of thought*.” On this general issue, Hegel criticizes the older metaphysics mainly for simply presupposing the truth of this claim, and not for claiming it (*SL* 54/63/64). One of Hegel’s central aims in *SL*, then, is to immanently prove the said presupposition of the pre-Kantian metaphysics. As he maintains, his doctrine of being, along with the doctrine of essence, falls under “objective logic” and, as such, “takes the place ... of former metaphysics,” especially of the final form of this science, namely, “*ontology*,” which “intended to investigate the nature of *ens* in general” that is, the unity of *being* and *essence* (*SL* 54–5/61/63). In short, rather than avoiding metaphysics or ontology altogether, Hegel believes that his logic takes its place.

Hegel does not simply propose to prove that what things are in themselves can be known; nor does he simply maintain that even “the most insignificant patch of color is ... an analogue of self-conscious Spirit.”²⁸ His project is more extraordinary and ambitious in this regard, for he maintains that all forms of reality or being are endowed with spirit or the self-knowing concept, of which categories (or universals) are but specific moments. “This universal aspect of things,” says Hegel, “is not something subjective, something [merely] belonging to us: rather is it, in contrast to the transient phenomenon, the noumenon, the true, objective, actual nature of things themselves ..., which exist in individual things as their substantial genera.”²⁹

Hegel’s last statement makes it clear that his logic is also a response to Kant’s critique of the older metaphysics. In the Kantian tradition, categories are the elemental forms of thought, and are inherent in human mind. They are the bases for any possible cognition of phenomena, and allow us to experience things or make sense (meaning) of them. On this point, Hegel firmly agrees with Kant.³⁰

However, there is an important sense in which Hegel departs from Kant in this regard. As Herbert J. Paton puts it, according to Kant, “we can have *a priori* knowledge by means of the categories, only if the categories are due to the nature of the mind and are imposed by the mind on the objects which it knows.”³¹ To say this differently, Kant denies that we could *confirm* the presence of these categories in the objects themselves. Therefore, Kant denies the possibility of metaphysics (at least according to Hegel), for he denies that categories could be proven to be “the *fundamental determinations of things*.”

Hegel's Critique of Kant

Generally speaking, Hegel's "objective logic" is a critical response to what Kant calls "transcendental logic."³² For this reason, and once again, Hegel's alternative logic has metaphysical or ontological implications, for it intends to solve the transcendental problem or limitation proposed by Kant on (the older) metaphysics in his *Critique of Pure Reason*.³³

According to Hegel, like Hume, Kant agrees that *a priori* categories, "such as those of universality and necessity" are not found in "perception." Relatedly, Kant opposes the metaphysical claim that categories "are present in external things themselves." Instead, he "maintains that they must be [only] *a priori*, i.e. that they must rest on reason" alone. "This, simply expressed, is the main point in the Kantian philosophy."³⁴

Kant gives us ample reason to agree with Hegel's interpretation of him. Categories for Kant are "pure concepts of [the faculty of] the understanding." He insists that there are twelve such categories, which "make up our entire cognition of things out of the bare understanding." Kant's categories are "pure" in the sense that, on their own, they are not contaminated by sensuous representations. Categories are, "of themselves, nothing but logical functions ...; as such they do not constitute the least concept of an object *in itself* [emphasis added]."³⁵ Therefore, while "much may be said *a priori* that concerns [the logical] ... form" of the empirical objects, "nothing whatsoever" can be said about "the things in themselves that ground" these objects.³⁶

According to Kant, what happens instead is that, by utilizing the *a priori* categories, the faculty of understanding puts "different representations together, and [grasps] what is manifold in them in one cognition."³⁷ In other words, "we attend merely to the act of the manifold's synthesis whereby we successively determine inner sense, and thereby attend to the succession of this determination of inner sense." However, "by no means does the understanding already find in inner sense such a combination of the manifold; rather, the understanding *produces it* [i.e., *the combination or unity*], inasmuch as the understanding *affects* the sense."³⁸

In Hegel's words, Kant takes *a posteriori* elements (objects of experience) as "fleeting and transient," which can only be organized and subjectively cognized on the basis of the *a priori* categories of the faculty of understanding. What is correct about Kant's view is that "categories are not contained in immediate sensation." For instance, we do not sense the "*unity*" (a Kantian category) of objects which appear to us as

manifold attributes; nor do we sense cause and effect (relational categories). However, the problem is that Kant treats each category as “present merely for our thinking.” For this reason, “*our* thoughts are caught off from ... [what] the thing is *in-itself*” (EL 81–3). Consequently, “according to the Kantian philosophy, the things that we know about are only appearances for *us*, and what they are *in-themselves* [their essences or true being] remains for us an inaccessible beyond” (EL 88). In a nutshell, Hegel wishes to take to task precisely this Kantian skepticism about the possibility of metaphysics or ontology.

Hegel’s present criticism of Kant is merely this: even though categories do “pertain to thinking as such,” as Kant also maintains against Hume’s empiricism, “it does not follow from this that they must therefore be merely our subjective [mental] possessions, and not also determinations of objects themselves” (EL 85–6). Since he claims otherwise, Kant’s “objectivity of thinking” is “only subjective in its form because, according to Kant, *a priori* thoughts, although they are universal and necessary determinations [for cognition], are still [only] *our thoughts*.” In this manner, Kant produces an unbridgeable gap between our thought determinations and the truth (being, essence, the in-itself) of “the externally present” objects (EL 83).³⁹ Thus, *according to Hegel*, Kant renders metaphysics or ontology impossible.

This Kantian skepticism is to be avoided with “the true objectivity of thinking,” which “consists in this: that thoughts are not merely our thoughts, but at the same time the *in-itself* of things and whatever else is objective” (EL 83). This resolution of the metaphysical problem can be proven, Hegel claims, if we consider “the forms of thinking ... in and for themselves”—that is, as “the object and the activity of the object itself” (EL 82). In other words, it is simply “the proper activity of the logical Idea to determine itself further and to unfold itself into Nature and Spirit” (EL 87), and find itself therein.

I suspect that no Kantian would be impressed by Hegel’s present solution, which simply presupposes the identity of thought determinations and the true being (the in-itself) of things. Indeed, as thus far formulated, Hegel’s solution is rather nonsensical. As John Burbidge complains, to say that “thought simply is being” is a “puzzling ... statement,” for “it is not clear why the determinations of thought apply to anything more than the thinking that is doing it.” Burbidge’s complaint against this puzzling statement is well taken. However, his subsequent claim that Hegel does not make such statements is simply untrue.⁴⁰

Relatedly, as we are about to find out, Kant does not deny that the “logical Idea” unfolds itself into the natural and spiritual realms. Instead, he denies that the identity of the categories of thought and things-in-themselves could be confirmed. According to Kant, transcendental reason is inherently boastful; it manages to fool itself into thinking that firm knowledge of the in-itself is possible. He calls this overconfidence “transcendental illusion,” which presumably occurs because reason constantly strives to transcend its own limitations.⁴¹ Kant identifies this grand illusion with the propensity to confuse the “subjective necessity” of connecting “our concepts” with the “objective necessity in the determination of things in themselves.” “Hence, there is a natural and unavoidable dialectic of pure reason.”⁴² Although what he means by dialectic is not always clear or consistent, Kant ultimately identifies “dialectic” with the said “logical illusion.”⁴³

“For Kant,” says Hegel correctly, “it lies in the very nature of thinking to lapse into contradictions (‘antinomies’).” Hegel generally agrees with this Kantian position, but (in) famously claims that Kant failed to see that contradictions are found in “all objects of all kinds, in *all* representations,” including “concepts, and ideas.” Because Kant failed to see this, he “stopped at the very negative result (that how things are in-themselves is unknowable), and did not penetrate to the cognition of the true and the positive significance of the antinomies” (*EL* 93). In other words, Kant failed to push the negative result (contradiction) to its positive conclusion. As a consequence of this timidity, he denied the possibility of the knowledge of the thing-in-itself.

Hegel’s criticism of Kant’s timidity in this regard may be observed, albeit briefly for now, in Hegel’s response to Kant’s treatment of antinomies. According to Kant, dialectic, as a branch of transcendental logic, is found in different forms in the three subfields of metaphysics. One of them is rational cosmology, in which the transcendental illusion (dialectic in this sense) takes the form of four “antinomies.” Each antinomy is presented as a thesis and an antithesis. For instance, in the first antinomy, the thesis states that the spatiotemporal world is finite; it has a temporal beginning and a spatial limit, or is “enclosed in boundaries.” The antithesis claims the opposite.⁴⁴ In a highly questionable manner, Kant attributes these opposing claims to two different metaphysical traditions: the idealist or “dogmatic” (Platonic) and the “empiricist” (Epicurean).⁴⁵ Kant “proves” the logical validity of both sides of an antinomy with apagogic arguments, which are regarded by many as unsatisfactory.⁴⁶ In a

nutshell, the idea here is that reason is capable of making opposite claims about the objective world, which are equally valid, and this produces a contradiction (untruth). We will examine some of these antinomies in more detail in the ensuing chapters.

According to Hegel, Kant adopts the either-or position he generally attributes to the understanding (the older metaphysics) and formal logic. Thus Kant's antinomies "contain nothing other than the quite simple categorical assertion of each of the two opposite moments of a determination" (e.g., the finite and the infinite) as "isolated" from each other, whereas, in truth, these opposite moments "contain" each other within themselves. This further means that neither moment "can be thought without the other" (*SL* 218/218/192); "neither one ... has truth" without the other (*SL* 226/225/197). In short, "in exhibiting these antinomies Kant confined himself to the cosmology [and even logic] of the older metaphysics [or the understanding]; and in his polemic against it, taking schema of the [isolated] categories as a basis, he produced four antinomies." However, muses Hegel once again, the scientific "comprehension of an object [of any kind] amounts precisely to our becoming conscious of it as a concrete unity of opposed determinations" (*EL* 93). Therefore, the "true solution" to the antinomies, namely, the genuinely scientific dialectic, "can only consist in the fact that two [opposite] determinations, which necessarily belong to one and the same concept, cannot be valid [true] by itself, in its one-sidedness; on the contrary, they are true only as sublated, only in the unity of their concept" (*SL* 218/218/191–2).⁴⁷

In conclusion, Hegel's critique of Kant illustrates that he wanted to restore metaphysics, not abandon it. To reiterate this point in his own words, Hegel criticizes Kant's "critical philosophy" for turning "metaphysics into [pure] logic," for giving categories merely a "subjective significance" and, consequently, turning the "thing-in-itself" into a mere, inaccessible "beyond" (*SL* 37/45/51). As Houlgate aptly points out, this amounts to the charge that Kant "sacrifices the one feature of pre-Kantian metaphysics that Hegel wants to preserve: the conviction that thought can disclose the innermost nature of things—of being—as such."⁴⁸ However, as we have already seen, Hegel thinks this disclosure can happen precisely because the innermost nature of being and the categories of thought are identical, and somehow this is established through the logically proven unity of the opposite categories of being.

Speculative Logic-Dialectic

Hegel famously claims that “the *logical*” cognition, “with regard to its form ... has three sides: (a) *the side of abstraction or of the understanding*, (b) *the dialectical or negative rational side*, (c) *the speculative or positively rational*” side (EL 125). As Alexandre Kojève rightly points out, we should not deduce from this comment, as many have done, the conclusion that Hegel reduces “*the dialectical*” “to the second aspect of ‘Logic.’”⁴⁹ As the concrete unity of all three “sides,” Hegel takes his logic to be entirely dialectical—or dialectic to be entirely logical. In short, as I will further illustrate shortly, “the logical” and dialectic are identical.

Hegel also maintains that “[1] the relationship of the earlier to the later philosophical systems is in general the same as [2] the relationship of the earlier to the later stages of the logical Idea” (EL 138).⁵⁰ Hegel’s point is not that (1) is merely analogously related to (2). Rather, it is that the principles of the historical philosophical systems are inseparably intertwined not only within the (Hegelian) logical system but also within its categories. As it turns out, and very generally stated, the three stages or “sides” of the logical coincide with the principles of three philosophical systems: the older metaphysics coincides with “(a) *the side of abstraction or of the understanding*,” Kant’s dialectic with “(b) *the dialectical or negative rational side*,” and Hegel’s own with “(c) *the speculative or positively rational*” side, which is the sublated unity of the first two. Another way to say this is that Hegel takes his system of logic as the dialectical unity of these three “positions of thought with respect to objectivity” (EL 45), which are also at work in the categories of thought themselves.

Generally speaking, Hegel refers to just about every “inadequate” philosophical position as “the understanding.” However, “the understanding,” as indicated in (a) and attributed to the older metaphysics, has a specific meaning. To state this briefly, the understanding is ultimately based on “*either-or*” truth claims, and so holds fast to the “distinctness” of the universals or categories as well as their attributes (EL 125–8). In other words, “the general procedure of this metaphysics” or “the understanding” consists in “grasping the objects of reason in abstract, finite determinations ..., and making abstract [self-] identity [of categories] into the [main] principle” (EL 76). Differently put, formal logic, especially “the rule of identity” or non-contradiction, is the main principle of the understanding (EL 74). As we have seen in the previous section,

Hegel also finds this position of thought in Kant's faltering approach to contradictions. For example, it is assumed by Kant that the finite cannot be infinite, or vice versa. This is essentially the "abstractive," finite thinking of the understanding.

However, the understanding "*belongs to the past ... only in relation to the history of philosophy.*" In other words, the abstractive way in which "the *mere understanding views* the objects of reason" is "always present" in logical thought, including speculative *reason* (EL 65). Thus the understanding is to be regarded as "one moment of speculative philosophy," but it is a moment at which speculative philosophy does "not stop" (EL 76). According to Hegel, "what is genuine and speculative is precisely what does not have any such one-sided determination in it, and is therefore not exhausted by it; on the contrary, being a totality [each concept] contains the determinations that dogmatism holds to be fixed and true in a state of separation from one another united within itself" (EL, 70, 131).

We have already outlined the Kantian, second, negatively dialectical, stage of the logical idea in the previous section. To repeat his critique of Kant in this regard, Hegel maintains that reason does not stop "at the merely negative result of the dialectic ... When the dialectic has the negative as its result, then, precisely as a result, this negative is at the same time the positive, for it contains what it resulted from sublated within itself, and it cannot be without it. This, [then,] ... is the basic determination of the third form of the Logical, namely the *speculative* or positively rational" (EL 131). For this reason, the third stage of the logical may also be called "dialectic." As Hegel reiterates, "the *speculative*" thought consists "in this dialectic," which is precisely "the grasping of opposites in their unity or of the positive in the negative." This resolution of the opposites, this third stage, is the "most important aspect of dialectic" (SL 44/52/56).

It follows from the last comment that dialectic or speculative logic is not only the unity of the three positions of thought ("sides") with respect to objectivity but also the categories or concepts of thought, which reflect these three positions of thought. In other words, these three sides "do not constitute three [separate] parts of the Logic, *but are moments of everything logically real*, i.e., of every *concept* or everything true in general" (EL 125). Therefore, the "*logically real*," according to Hegel, is irreducible to abstract, mental concepts; it is also the ground of "everything true," which includes being or reality.

Thus, on the assumption that “every concept” is the truth of everything, Hegel assumes that the *logical* is also metaphysical or ontological, as is the *speculative*. In addition to its presumed ontological implications, Hegel here repeats that “every *concept*” contains the three sides of the logical idea.

To say this differently, Hegel promises to subject each concept to three considerations, the speculative result of which is to reflect the fuller truth of each concept. However, as we will see, logic is to begin with the most abstract concept, namely, *pure being*, from which more concrete concepts are to issue immanently. This further means that the triadic development of each concept is to bring about its transition to another concept, and so on, until we reach the absolute idea.

Accordingly, adds Hegel elsewhere, the speculative “dialectic of the concept consists not merely in producing and apprehending the determination as an opposite and limiting factor, but in producing and apprehending the *positive* content and result which it contains; and it is this alone which makes it a *development* and immanent progression.” At the same time, “this dialectic ... is not an *external* activity of subjective thought, but the *very soul* of the content which [like the bud of a tree] puts forth its branches and fruit organically,” that is, immanently through its own activity, and from within itself.⁵¹ Thus, in addition to its triadic rhythm, the speculative logic or dialectic is an immanent development, according to Hegel.

In conclusion, Hegel criticizes the older metaphysics, in part, for failing to demonstrate its own standpoint, namely, the identity of thought and being. On the other hand, he faults Kant for denying the possibility of this demonstration, since he leaves this identity at the stage of unresolved contradiction. This double-edged conclusion pertains to Hegel’s main mission in *SL*: by means of the triadic dialectic, he wants to overcome the limitations of both. Relatedly, the triadic dialectic we have just outlined permeates Hegel’s logical system. Although he does not always explicitly advertise it, he often (not always) develops his categories in response to, or in conjunction with, the other positions of thought. Lastly, as we have seen, Hegel defines speculative logic as immanent development. This aspect of his logic is attached to the demand for a presuppositionless, immanent logic (philosophy). In other words, according to Hegel, the triadic development of categories in speculative logic is precisely their self-development, and so is not imposed on them

externally by Hegel. Hegel thus believed that his presuppositionless, immanent logic avoids being purely subjective.

PRESUPPOSITIONLESS, IMMANENT LOGIC

Principles of Fichte and Schelling

Hegel “asserts that no premise other than the validity of the lower category is requisite to enable us to affirm the validity of the higher,”⁵² meaning that each higher category achieved along the way must itself emerge immanently. “It is in this self-construing [i.e., immanently self-developing] manner alone,” he writes, that “philosophy [or logic] is capable of being an objective, demonstrated science” (*SL* 7–8/17/28). This statement implies that scientific logic cannot presuppose anything. Indeed, according to Hegel, “the concept of ... [logic itself] is generated in the course of its exposition and cannot therefore be assumed in advance.” Consequently, the knowledge of what logic is “only emerges as the final result and completion of the whole exposition” (*SL* 27/35/43).

The first issue that needs to be tackled in a science of this kind is how, or with what, to begin it. “Only in recent times,” notes Hegel, have people become aware of “the difficulty to find a *beginning* in philosophy” (*SL* 59/65/67). In Hegel’s times (and before) the said “difficulty” was related to the demand to find an axiomatically true principle or certainty, on the basis of which philosophical systems could be built. René Descartes’s search for, and deduction of, “*cogito ergo sum*” is a prominent example of this effort, as Hegel notes elsewhere.⁵³ However, Hegel’s interest in the said “difficulty” was more directly related to the interventions of both Johann Fichte and Friedrich Schelling.

“I have labored upon a rigorously scientific transcendental philosophy,” writes Fichte, which presupposes only one rule: “One should continue to abstract from everything possible, until something remains from which it is totally impossible to abstract.” What remains after this total abstraction, which resembles Descartes’s method, is the abstracting subject or the intellect, which cannot be dispensed with. Thus Fichte’s “philosophy is erected upon ... the [abstracting] I.”⁵⁴ Fichte’s rationale for this (almost) total abstraction is this: “A finite rational being [intellectually] possesses nothing whatsoever beyond experience.” Thus “it appears incomprehensible how he could ever succeed in elevating himself above

experience.” Yet, such an elevation is necessary, lest philosophy itself becomes externally determined. A way out of this predicament is available to “the philosopher” who, “by means of a free act of thinking ... , is able to [elevate] ... himself above experience.” In other words, “if he abstracts from the thing, then he is left with an intellect in itself as the explanatory ground of experience.”⁵⁵ This ground, then, is the “I” or the ego (the “rational being”), which is identical with itself in its “free act of thinking.”⁵⁶

According to Hegel, Fichte’s principle is designed to let “reason itself exhibit its own determinations” (*SL* 32/41/47).⁵⁷ More specifically, Hegel credits Fichte for having “reminded us that the *thought-determinations* must be exhibited in their *necessity*” (*EL* 84). In other words, Fichte took “the ego to be the absolute principle, so that from it ... all the matter in the universe must be represented as produced.” Thus “the Fichtean philosophy has the great advantage of having set forth the fact that Philosophy must be a science derived from one supreme principle, from which all determinations are necessarily derived.”⁵⁸

However, Fichte’s principle, “Ego = Ego ... , remains only the rule [or principle] whose infinite fulfillment is postulated but not constructed in the system.”⁵⁹ In a nutshell, Hegel complains that “Fichte merely set forth [presupposed] this Notion; he did not bring it to a scientific realization [into a system of reality] from itself.”⁶⁰ Moreover, and relatedly, as George di Giovanni writes, Hegel complains that both “Kant and Fichte had begun by saying too much—Kant, by introducing a science of ready-made categories which he had neither derived nor could further develop; and Fichte, by promoting freedom [of the ego] as an avowedly extra-conceptual cause.”⁶¹

Schelling, on the other hand, declared to “have presupposed nothing but what can immediately be taken from the conditions of knowing itself as a first principle, something originally and simultaneously subjective and objective.”⁶² Schelling’s “first principle” thus implies the identity of the subject and the object of knowledge (the so-called absolute indifference), and is, in the Hegelian parlance, both presupposed and abstracted. Schelling does not deny that his principle is presupposed. As he puts it elsewhere, “The first presupposition of all knowledge is that the knower and that which is known are the same.”⁶³

This presupposed principle is meant as a superior alternative to the correspondence theory of truth and knowledge. The latter posits the subject and the object of knowledge as two distinct principles, which

converge to form the truth or knowledge when they correspond with each other. According to Schelling, this dualistic approach fails to explain how knowledge of the object (being) itself is possible. Schelling also considered his identity-philosophy as a departure from Fichte's merely subjective idealism and Kant's reflective and rather dualistic philosophy, which denied the identity of being and thought. In short, Schelling's principle *presupposes* the absolute, unconditional, immediate identity of the subject and the object (or of thought and being, of the ideal and the real), which principle is posited as the necessary condition for the possibility of knowledge.

Hegel is not impressed. "What is lacking in Schelling's philosophy," he says, "is ... the fact that the point of indifference [absence of difference] of subjectivity and objectivity, or the Notion [concept] of reason, is absolutely presupposed, without any attempt being made at showing that this is the truth." According to Hegel, the scientific "proof that this identity of subjective and objective is the truth, could only be brought about by means of each of the two being investigated in its logical, *i.e.* essential [immanent] determinations; and in regard to them, it must then be shown that the subjective signifies the transformation of itself into the objective, and that the objective signifies its not remaining such, but making itself subjective." (Here, Hegel roughly anticipates his system of logic, which consists of the immanent transition of the "objective" and "subjective" logics therein.) In short, Schelling's principle has "no [such] dialectic present in it whereby those opposites [or differences] may determine themselves to pass over into their unity, and in so doing to be comprehended."⁶⁴

Once again, Hegel's alternative to Schelling contains ontological implications; it is to "be shown that the subjective signifies the transformation of itself into the objective," and vice versa. This mutual self-transformation presumably amounts to the (sublated) identity of subjective and objective truths and being. But the point I wish to emphasize here is that, according to Hegel, this identity should not be presupposed in advance; rather, it must be proven immanently. In fact, Hegel goes so far as to claim that "consummate skepticism" or "universal doubt" must precede this development, which further dictates that we begin philosophy with "total *presuppositionlessness*" (EL 124). This demand has raised many eyebrows in the past and, as we are about to see, for good reasons.

“With What Must the Science Begin?”

In the first place, says Hegel, “the beginning, as the ground [*Grund*] on which everything is built, should be investigated above all else, and that we should not go any further until it has been proven” as a proper beginning (*SL* 23/32/41). This initial examination indicates to Hegel that the beginning should forget all previous examination: “In no science is the need to begin ... without preliminary reflections felt more strongly than in the science of logic.” This means that logic “cannot presuppose any of these forms of reflection and the rules and laws of thinking, for these make up a part of its own content.” These “have to be established within” the science of logic itself (*SL* 26/35/43).

According to Hegel, the “difficulty” of finding the proper beginning of philosophy ultimately resolves itself into a simple decision: “The beginning of philosophy must be either mediated or immediate” (*SL* 59/65/67). The deck is already stacked in favor of *immediacy*—by definition any “mediated result” is not a beginning. As we will see, Hegel is to begin logic with *pure being*, which he takes to be sheer immediacy.⁶⁵ It will also become rather obvious shortly that the demand for a presuppositionless, unmediated beginning is impossibly paradoxical, and that Hegel’s response to this problem is (naturally) very inconsistent.

For instance, Hegel cites several mega processes that have collectively made possible the pure beginning of his logic. First, “as a matter of fact,” says he, “the necessity to deal with pure thoughts [*reinen Gedanken*] presupposes a long road that the human spirit must have traversed” (*SL* 14/23/34). Thus an arduous and prolonged reflection in the history of philosophy stands behind the said result. Moreover, the result also presupposes the mental work done by “the experiential sciences” (*EL* 36). Lastly, and relatedly, the result has emerged from the Hegelian phenomenological consideration (*SL* 62/67/68–9).

The said consideration refers to Hegel’s own previous reflection. The abstract, immediate identity of being and thought is presumably demonstrated in his *Phenomenology of Spirit*. Consequently, “thought ... knows its object to be itself.” If so, we no longer have “the opposition between being and knowing.”⁶⁶ In *SL*, Hegel repeats that, “in the *Phenomenology of Spirit*,” he has “presented consciousness in its motion,” which “goes through all the forms of the *relation of consciousness to the object*,” the “result” of which “is the concept of science.” “Therefore, this concept needs no justification here,” since it has already been justified in that

work. In short, the concept of logical science is presupposed (in *SL*), and will remerge in this science again. Therefore, “pure science [i.e., logic] presupposes liberation from the opposition of consciousness [to its object]. It contains *thoughts in so far as these [thoughts] are just as much the thing in itself [die Sache an sich selbst]*, or *the thing in itself* is, insofar as it is *pure thought [reine Gedanke]*” (*SL* 33–5/42–4/48–9). This is an indisputably ontological position, which is clearly posited against Kant. It also presupposes the work done in *Phenomenology*. As importantly, it presupposes the mediated identity of being and thought.

However, in order to ensure that logic remains “immanent in its scientific development,” Hegel recommends that we simply “take up *what is available before us*” (*SL* 62/68/69). In a sense, then, the beginning of logic can be rescued from its past (historical and philosophical) presuppositions and reflections with the simple act of ignoring them. Indeed, Hegel goes so far as to claim that “there is, therefore, no need for other preparations, or further reflections or points of connection, to enter into philosophy” (*SL* 67/72/72).

What is thus available before us is “*simple immediacy*,” which is “without any distinction.” This simple immediacy is precisely *pure being* (*SL* 62/68/69). However, this “simple immediacy” entails the identity of “pure being” and “pure thought” (*EL* 124). Thus pure being is “thinking as an *activity*” (*EL* 49), namely, “the abstract element of *thinking*” (*EL* 45). “Logic is thus to be conceived as the system of pure reason [*reinen Vernunft*], as the realm of pure thoughts” (*SL* 35/44/50). Comments such as these suggest that logic is not concerned with ontology. However, as we have repeatedly seen, Hegel thinks pure thought is the inner truth of being. This assumption raises an important question. Who or what is the dialectical subject?

The Subject of Immanent Dialectic

As Herbert Marcuse reports, “Hegel repeats over and over that dialectics has this ‘negative’ character. The negative ‘constitutes the quality of dialectical Reason,’ and the first step ‘towards the true concept of Reason’ is a ‘negative step’; the negative ‘constitutes the genuine dialectical procedure.’”⁶⁷ Marcuse’s report emphasizes the *negating* character of dialectical reason, which entails a “step” or “procedure” to go beyond its initial thoughts or categories.

However, Hegel daringly claims that categories or concepts “must investigate [or negate] themselves ..., [and] determine their own limits and point out their own defects.” This immanent self-activity of the concept is precisely “dialectic” (*EL* 82), which is the concept-being’s “own immanent activity or, what is the same, its necessary development” (*SL* 10/19/31). In short, even though this may appear shocking to many of us, Hegel *does* think that categories are immanently dialectical just by themselves—they determine themselves without our intervention.

This further means that a category “has the shape of the self” (*SL* 35/43/49). It is in this sense that Hegel thinks the categories of logic are “inherently living determinations,” which “take their own course” of development into their own hands (*EL* 59). Because they are essentially pure spirits, “dialectic” must be “considered as dwelling within” these determinations (*EL* 82). Therefore, according to Hegel, speculative “philosophical thinking ... simply takes up its object ..., and lets it go in its own way, while it simply watches the movement and development of it, so to speak. To this extent [speculative] philosophizing is wholly passive” (*EL* 305).

Houlgate charitably reads Hegel as saying, “it falls to the philosopher to render explicit the self-negation that is implicit in a specific category.” Thus “Hegel clearly implies that unless we are active in employing our understanding and reason we shall not be in a position to follow passively the immanent development of the categories.”⁶⁸ Be that as it may, Hegel explicitly states that categories develop on their own, and render themselves explicit in so doing. As I see it, Hegel makes this outlandish claim to avoid the charges that his logic coincides with the kind of subjective idealism he intends to avoid. Accordingly, if we set aside our reflection altogether, claims Hegel, we are left with the “abstract indeterminateness and immediacy,” which thus “must be the beginning” (*SL* 74/79/79).

This is a very difficult pill to swallow. Schelling was quick to notice the problem. Hegel, he argues, substitutes “thought” with the reflectionless pure concept (immediate, pure being), when in fact “the concept for its own part would lie completely immobile if it were not the concept of a thinking subject, i.e. if it were not thought (*Gedanke*).” Consequently, he calls Hegel’s approach “deception.”⁶⁹ Moreover, as Kierkegaard complains, it is “impossible to begin immediately with the [reflectionless] immediate [being],” for it is impossible for thought to cancel itself out. As Hegel himself admits, reflection is “infinite” and “cannot stop itself”

for this reason. Therefore, Hegel's reflectionless beginning "is a pure chimera."⁷⁰

At any rate, Hegel insists on making his beginning with pure being (or immediacy), which is first "represented as having come to be through mediation," as "presupposed pure knowing." Now, we have abstracted this presupposition out. Hence, "if no presupposition is to be made and the beginning itself is taken *immediately*, then its only determination is that it is to be the beginning of logic, of thought as such." This "thought as such" is neither knowledge nor active reflection; it is simply being as such. "Consequently," the logical "beginning" must be "only the *immediacy* itself" which, once again, "is *pure being*" (SL 63/69/70).

The Anticipation of the Absolute

If the beginning is immediacy as such, then how are we to proceed forward? Hegel's first response to this question is quite puzzling. All we have presently is "simply the resolve, which can also be regarded as arbitrary, to consider thought as such," says Hegel. In the first ensuing sentence, the "resolve" becomes a specific presupposition and purpose: "the beginning must be *absolute*, or what is synonymous to it, an *abstract* beginning." Obviously, *absolute* and *abstract* are not synonyms. But Hegel's equation of them is telling, for his pure being is the total collapse of the absolute being into simple, even empty, immediacy. Yet, the beginning "*must not presuppose anything*, must not be mediated by anything or have a ground." Rather, it "is to be the ground of the whole science" (SL 63/68–9/69–70). Thus Hegel presupposes already that the beginning is the unmediated absolute ground of the entire logic (the absolute Idea), from which it is abstracted,⁷¹ and into which it will immanently develop itself in due course.

In the following passage, Hegel repeats this secret presupposition in more detail:

The essential requirement for the science [of logic] is not so much that the beginning must be a pure immediacy, but rather that the whole of the science [must form] a circle in itself, in which the first also becomes the last and the last also [becomes] the first ... Further ..., that which constitutes the beginning remains, without ever disappearing, the underlying ground of all that follows [in the course of immanent development] ... Thus the beginning of philosophy is the permanent and self-preserving ground of

the entire subsequent development, which remains completely immanent in its further [more concrete] determinations (*SL* 64–5/70/71).

Thus Hegel insists that the beginning is “something simply immediate and abstract.” This immediacy is only “mediated” through the “progress” of its immanent development. As a result of this development, “the line of the scientific progression *turns into a circle*.” In other words, what matters is that the circular self-determination and return-to-self emerges immanently from the immediacy. Therefore, the whole range of “scientific” development just described “must be determined by the nature of the thing [*Sache*] itself and its content” (*SL* 66/71/71–2). It must be shown to be an entirely necessary and immanent self-development, both as the thing’s self-activity and determination of itself as itself.

The foregoing paragraphs basically outline the logic of the entire *SL*. This already amounts to too much presupposition for a presupposition-less logical development, which also declares in advance that what logic is “cannot be predicted beforehand,” for “the concept of logic produces itself in the course of [its development], and thus cannot be premised” (*SL* 26–7/35/43). In other words, “to want to be clear about the nature of cognition *prior* to science is to require that it be discussed *outside* ... [science]; this cannot be done *outside* science, at least not in a scientific manner, which [manner] alone is what is to be done here [in *SL*]” (*SL* 61/67/68).

Hegel realizes that he has already exposed “the nature of cognition ... *prior* to science.” However, he has a readymade solution to this problem: “these [preliminary comments] cannot be used to explain and to confirm that exposition ..., since they are occasioned by preconceived notions and reflections.” We are assured that all these “prejudices” will be dispensed with “within the science itself” (*SL* 63/69/70). “Therefore, what is presupposed in this introduction is not intended to justify [either] the concept of logic or its content and method in advance.” Rather, these preliminary anticipations are simply offered here to clarify “the point of view from which this science is to be considered” (*SL* 27/35–6/43). Indeed, “this preliminary reasoning is intended to eliminate all preliminaries” (*SL* 74/79/78).

Perhaps it is too premature to accuse Hegel of wanting to have his cake and eat it too. One might wish to say in his defense that the foregoing “anticipation” is simply a description of what happens *immanently* throughout *SL*.⁷² However, even if we accept the claim

that the preceding preliminaries can be done away with, the real challenge remains. As Klaus Hartmann asks, “How could the presuppositionless beginning lead to anything; how could the absence of determination lead to richness?” According to Hartmann, Hegel’s dialectical advance actually presupposes both the concrete result and the “unity of thought and being.”⁷³ This assessment is shared by many famous critics of Hegel, including Schelling and Feuerbach.⁷⁴

Houlgate, however, disagrees with this tradition. He complains that “all” of Hegel’s “orthodox” critics “take for granted ‘in advance and without question’ that Hegel himself takes for granted ‘in advance and without question’ the goal and outcome of his philosophy. None of them takes seriously Hegel’s clear insistence that the beginning of the *Logic* ‘may not presuppose anything’ (SL 70 [the Miller translation])—or at least none accepts that Hegel lives up to his own demands.”⁷⁵ As far as I can tell, Hegel’s “orthodox” critics do not deny that Hegel demands a presuppositionless logic; they simply deny that he successfully delivers such logic. In the remaining nine chapters, I intend to illustrate that their assessment is generally correct. This further means that both my analysis and critique of *SL* are ultimately concerned with whether or not Hegel “lives up to his own demands.”

NOTES

1. Robert B. Pippin, *Hegel’s Idealism: The Satisfaction of Self-Consciousness* (Cambridge, UK: Cambridge University Press, 1989), 3 (Pippin 1989).
2. Quentin Lauer, S.J., *Essays in Hegelian Dialectic* (New York, NY: Fordham University Press, 1977), 114 (Lauer 1977).
3. Karl Popper, *The Open Society and Its Enemies, Vol. 2: The High Tide of Prophecy: Hegel, Marx, and the Aftermath* (Princeton, NJ: Princeton University Press, 1962), 28, 40. According to another famous critic, “the whole imposing edifice of ... [Hegel’s] system” rests on a fundamental “mistake.” Bertrand Russell, *History of Western Philosophy* (London: Allen & Unwin, 1961), 715. Indeed, the majority of contemporary academic philosophers do not take Hegel very seriously. Cf. Allen W. Wood, “Reply,” *Bulletin of the Hegelian Society of Great Britain* 25, (Spring/Summer, 1992): 34–50, 34. However, as Stanley Rosen notes,

- in recent years, the interest in Hegel “has come back among academic philosophers.” Stanley Rosen, *The Idea of Hegel’s Science of Logic* (Chicago, IL: The University of Chicago Press, 2014) (Russell 1961; Popper 1962; Wood (1992) Rosen 2014).
4. Justus Hartnack, *An Introduction to Hegel’s Logic*, trans. Lars Aagaarg-Mogensen (Indianapolis, IN: Hackett, 1998), x (Hartnack 1998).
 5. Richard D. Winfield, *Hegel’s Science of Logic: A Critical Rethinking in Thirty Lectures* (New York, NY: Rowman & Littlefield, 2012), 1 (Winfield 2012).
 6. Theodor W. Adorno, *Hegel: Three Studies*, trans. Shierry W. Nicholsen (Cambridge, MA: The MIT Press, 1994), 89 (Adorno 1994).
 7. Pippin, *Hegel’s Idealism*, 3.
 8. Hartnack, *An Introduction to Hegel’s Logic*, x.
 9. Houlgate, *The Opening of Hegel’s Logic: From Being to Infinity* (Lafayette, IN: Purdue University Press, 2006), 1 (Houlgate 2006).
 10. The following is not meant to be a complete list: John McTaggart, *A Commentary on Hegel’s Logic* (Cambridge, UK: Cambridge University Press, 1910); Geoffrey R. G. Mure, *A Study of Hegel’s Logic* (Oxford, UK: Clarendon Press, 1950); John Burbidge, *On Hegel’s Logic: Fragments of a Commentary* (Atlantic Highlands, NJ: Humanities Press, 1981); Errol E. Harris, *An Interpretation of the Logic of Hegel* (Lanham, MD: University Press of America, 1983); Pippin, *Hegel’s Idealism: The Satisfactions of Self-Consciousness*; Clark Butler, *Hegel’s Logic: Between Dialectic and History* (Evanston, IL: Northwestern University Press, 1997); Hartnack, *An Introduction to Hegel’s Logic*; Robert M. Wallace, *Hegel’s Philosophy of Reality, Freedom, and God* (New York, NY: Cambridge University Press, 2005); Houlgate, *The Opening of Hegel’s Logic*; David G. Carlson, *A Commentary to Hegel’s Science of Logic* (New York, NY: Palgrave, 2007); Winfield, *Hegel’s Science of Logic: A Critical Rethinking in Thirty Lectures*; Rosen, *The Idea of Hegel’s Science of Logic*; Luis Guzman, *Relating Hegel’s Science of Logic to Contemporary Philosophy: Themes and Resonances* (New York, NY: Palgrave, 2015) (McTaggart McTaggart 1910; Mure 1950;

- Burbidge 1981; Harris 1983; Butler 1997; Carlson 2007; Wallace 2005; Guzman 2015).
11. “Hegel’s writings have so long been shunned and despised, and his theories so commonly ridiculed as mere phantasy and paradox, that few are likely to approach with tolerance any attempt to rehabilitate him.” Harris, *An Interpretation of the Logic of Hegel*, xi. “As it now stands, few have ever mastered the *SL* since it was published between 1812 and 1816, and revised in 1831.” Carlson, *A Commentary to Hegel’s Science of Logic*, 1. (The second edition of *SL* was published in 1832.) *SL* has been either “gravely misinterpreted or largely ignored.” Winfield, *Hegel’s Science of Logic*, 1.
 12. Friedrich Schelling, *The Grounding of Positive Philosophy: The Berlin Lectures*, trans. Bruce Matthews (Albany, NY: SUNY Press, 2007), 150 (Schelling 2007).
 13. Pippin, *Hegel’s Idealism*, 4.
 14. John N. Findlay, *Hegel: A Re-Examination* (New York, NY: Collier Books, 1958), 83–84 (Findlay 1958).
 15. “The claim of necessity” is indispensable to Hegel’s logic. Michael Forster, “Hegel’s Dialectical Method,” in *The Cambridge Companion to Hegel*, ed. Frederick C. Beiser., 130–67 (Cambridge, UK: Cambridge University Press, 1993), 145 (Forster 1993).
 16. Kierkegaard, *Concluding Unscientific Postscript to the Philosophical Crumbs*, 93.
 17. Butler dismissively calls this the “arid approach.” Butler, *Hegel’s Logic: Between Dialectic and History*, 6.
 18. As Findlay notes, “there is a tremendous amount of arbitrariness in the course he takes” in *SL*. John F. Findlay, “Comments on Weil’s ‘The Hegelian Dialectic,’” in *The Legacy of Hegel*, ed. J.J. O’Malley, et al. (The Hague: Nijhoff, 1973), 69. “Most of [Hegel’s] arguments collapse ignominiously without the underlying premise of ontological necessity.” Charles Taylor, *Hegel* (Cambridge, UK: Cambridge University Press, 1977), 348 (Findlay 1973; Taylor 1977).
 19. Throughout this book, I make a concerted effort to adopt Hegel’s own criterion for a legitimate criticism, which requires grasping the philosophical standpoint of the opponent. Thus, given Hegel’s standpoint, which again is the aforementioned

“method,” what should interest us as critics “is *how* that ... (system) is obtained, and whether we have arrived at it legitimately or not.” Michael Rosen, *Hegel’s Dialectic and its Criticism* (Cambridge, UK: Cambridge University Press, 1982), 25, 23. In other words, Hegel’s project should be deemed successful “so long as examination shows that not one of the development’s determinations owes its character or order of presentation to introductions of extraneously given material or the stipulating of an extraneous determiner.” Richard D. Winfield, *Reason and Justice* (Albany, NY: SUNY Press, 1988), 130 (Rosen 1982; Winfield 1988).

20. Houlgate, *The Opening of Hegel’s Logic*, 4.
21. All quotations and citations from *EL* are from G. W. F. Hegel, *The Encyclopaedia Logic: Part I of the Encyclopaedia of Philosophical Sciences with the Zusätze*, trans. T. F. Geraets et al. (Indianapolis, IN: Hackett, 1991) (Hegel 1991a).
22. Houlgate, *The Opening of Hegel’s Logic*, 4.
23. For works that treat Hegel’s logic as metaphysics in some sense, see McTaggart, *Studies in the Hegelian Dialectic*; Mure, *A Study of Hegel’s Logic*; Jean Hyppolite, *Logic and Existence*, trans. Leonard Lawlor and Amit Sen (Albany, NY: SUNY Press, 1997); Taylor, *Hegel*; Harris, *An Interpretation of the Logic of Hegel*; Butler, *Hegel’s Logic: Between Dialectic and History*; Houlgate, *The Opening of Hegel’s Logic* (Hyppolite 1997).
24. See Terry Pinkard, *Hegel’s Dialectic: The Explanation of Possibility* (Philadelphia: Temple University Press, 1988); Pippin, *Hegel’s Idealism: The Satisfactions of Self-Consciousness*; John W. Burbidge, *The Logic of Hegel’s ‘Logic’: An Introduction* (Toronto: Broadview Press, 2006); George Di Giovanni, “Introduction,” in G.W.F. Hegel, *The Science of Logic*, trans. George di Giovanni (New York, NY: Cambridge University Press, 2010) (Pinkard 1988; Burbidge 2006; Giovanni 2010).
25. For a brief but effective introduction to Hegel’s relationship to metaphysics, see Frederick C. Beiser., “Introduction: Hegel and the Problem of Metaphysics,” in *The Cambridge Companion to Hegel*, ed. Frederick Beiser., 1–24 (New York, NY: Cambridge University Press, 1993) (Beiser 1993).
26. Hegel, *Philosophy of Nature*, 6.

27. For a useful critique of Hegel's approach to the older metaphysics, see Michael Inwood, *Hegel* (Oxon, UK: Routledge, 1983), 155–192 (Inwood 1983).
28. Findlay, *Hegel: A Re-examination*, 162.
29. G. W. Hegel, *Philosophy of Nature, Being Part Two of the Encyclopaedia of the Philosophical Sciences*, trans. A. V. Miller (Oxford, UK: Oxford University Press, 1970), 9 (Hegel 1970).
30. According to Hegel, logic, which consist of the relations of categories of thought, belongs to human nature:

In our days, it cannot be recalled often enough that what distinguishes man from the animal is *thought*. [His] language penetrates all that becomes inward for him, [that is,] perception [*Vorstellung*] in general ..., and everything he expresses in language contains a category [i.e., the logical]...; if so, the logical is very natural to him, or, rather, the same is his peculiar *nature* (SL 11/20/31).

31. Herbert. J. Paton, *Kant's Metaphysic of Experience* (London: George Allen and Unwin, 1936), 258 (Paton 1936).
32. According to Kant, “by means” of transcendental logic “we think objects completely *a priori*.” There is also pure logic, which is concerned merely with the (formal) rules of cognition, and “general logic,” which subsumes transcendental and pure logic. Immanuel Kant, *Critique of Pure Reason*, trans. Paul Guyer and Allen W. Wood (Cambridge, UK: Cambridge University Press, 1998), A 5–57/B79–82 (Kant 1998).
33. Hegel's critical reception of Kant is obviously too complicated to be adequately described in this brief section. For some recent studies on this issue see: Pippin, *Hegel's Idealism: The Satisfactions of Self-Consciousness*; Karl Ameriks, *Kant and the Fate of Autonomy: Problems in the Appropriation of Critical Philosophy* (Cambridge, UK: Cambridge University Press, 2000); Dieter Henrich, *Between Kant and Hegel: Lectures on German Idealism* (Cambridge, MA: Harvard University Press, 2003), 299–331; Wallace, *Hegel's Philosophy of Reality, Freedom, and God*; Beatrice Longuenesse, *Hegel's Critique of Metaphysics* (Cambridge, UK: Cambridge University Press, 2007); William F. Bristow, *Hegel and the Transformation of Philosophical Critique*, (Oxford, UK: Oxford University Press, 2007); Sally Sedgwick, *Hegel's Critique*

- of *Kant: From Dichotomy to Identity* (Oxford, UK: Oxford University Press, 2012); John McCumber, *Hegel's Mature Critique of Kant* (Stanford, CA: Stanford University Press, 2014) (Ameriks 2000; Henrich 2003; Bristow 2007; Longuenesse 2007; Sedgwick 2012; McCumber 2014).
34. G. W. F. Hegel, *Lectures on the History of Philosophy*, Vol. 3, trans. Elizabeth S. Haldane (London: Kegan Paul, 1896). 427–8 (Hegel 1896).
 35. Immanuel Kant, *Prolegomena to Any Future Metaphysics Section*, trans. Gary Hatfield (Cambridge, UK: Cambridge University Press, 2004), 75–6 (Section 39) (Kant 2004).
 36. Kant, *Critique of Pure Reason*, A49/B66.
 37. Ibid., A77–8/B103.
 38. Ibid., B154–5.
 39. For a similar criticism of Kant, see Hegel, *Lectures on the History of Philosophy*, Vol. 3, 441–4.
 40. Since Burbidge thinks that it is “preposterous” to readily identify thought with being, or the *prius* thereof, he opts for a “logical” reading of Hegel’s logic. On this reading, the Hegelian logic is essentially “thought thinking itself.” John W. Burbidge, “The Relevance of Hegel’s Logic,” *Cosmos and History: The Journal of Natural and Social Philosophy* 3, no. 2–3 (2007): 211–21, 211–3 (Burbidge 2007).
 41. Kant, *Critique of Pure Reason*, A591/B619.
 42. Ibid., A297–8/B354–5.
 43. Ibid., A293/B350. He also calls his own criticism of this logic “the transcendental dialectic,” which contends “itself with uncovering the illusion in transcendental judgments,” namely, those metaphysical judgments that do not know their limitations. Ibid., A297–8/B354–5.
 44. Ibid., A426–7/B454–5.
 45. Ibid., A471–2/B499–500.
 46. For an informative and, in my view, soundly critical assessment of Kant’s dialectic, see Jonathan Bennett, *Kant’s Dialectic* (Cambridge, UK: Cambridge University Press, 1974). Also see, Norman K. Smith, *Commentary to Kant’s Critique of Pure Reason* (Atlantic Highlands, NJ: Humanities Press, 1992), especially 478–571 (Bennett 1974; Smith 1992).

47. It must be pointed out here in passim that Hegel's assertorically established formula does not successfully controvert Kant's skepticism. In other words, even if we assume that Hegel is able to resolve antinomies, it does not follow that his resolution successfully establishes the identity of thinking and being. Moreover, it will be observed throughout this study that Hegel's resolutions are, without an exception, unconvincing, not to mention the fact that many of the so-called "contradictions" are not really contradictions at all. In the final analysis, Hegel's critique of Kant mainly amounts to the complaint that "Kant's conclusions fall short of ... [Hegel's] own philosophical expectations." Paul Guyer, "Thought and Being: Hegel's Critique of Kant," in *The Cambridge Companion to Hegel*, ed. Frederick C. Beiser., 171–210 (Cambridge, UK: Cambridge University Press, 1993), 171 (Guyer 1993).
48. Houlgate, *The Opening of Hegel's Logic*, 124.
49. Alexandre Kojève, *Introduction to the Reading of Hegel: Lectures on the Phenomenology of Spirit*, ed. Allan Bloom, trans. James H. Nichols, Jr. (Ithaca, NY: Cornell University Press, 1969), 169 (Kojève 1969).
50. Generally speaking, "the philosophy that is the latest in time is the result of all the preceding philosophies; and it must therefore contain the principles of all of them; for this reason it is the most unfolded, the richest, and the most concrete one" (*EL* 37–8; also 138).
51. G. W. F. Hegel, *Elements of the Philosophy of Right*, trans. Hugh B. Nisbet, (Cambridge, UK: Cambridge University Press, 1991), 59–60 (Hegel 1991b).
52. John McTaggart, *Studies in the Hegelian Dialectic* (Cambridge, UK: Cambridge University Press, 1896), 3. To elaborate, "Hegel's *Logic* ... seeks to provide an immanent, presuppositionless derivation of the basic categories of thought and being. This derivation of the categories is 'presuppositionless' because it takes for granted no specific rules of thought and, indeed, is preceded by the act of setting aside all our familiar determinate assumptions about thought and being." Stephen Houlgate, *An Introduction to Hegel: Freedom, Truth and History*, Second Edition (Oxford, UK: Blackwell, 2005), 106 (McTaggart 1896; Houlgate 2005).
53. See Hegel, *Lectures on the History of Philosophy*, Vol. 3, 226 ff.

54. Johann G. Fichte, "Concerning the Difference between the Spirit and the Letter within Philosophy," in *Early Philosophical Writings*, ed. and trans. Daniel Breazeale, 185–215 (Ithaca, NY: Cornell University Press, 1988), 204 (Fichte 1988).
55. Johann G. Fichte, "An Attempt at a New Presentation of the Wissenschaftslehre," in *Introductions to the Wissenschaftslehre and Other Writings*, ed. and trans. Daniel Breazeale, 1–118 (Indianapolis, IN: Hackett, 1994), 10–1 (Fichte 1994).
56. For a brief but useful survey of Hegel's intellectual development in relation to German idealism, see Henry S. Harris, "Hegel's Intellectual Development," in *The Cambridge Companion to Hegel*, ed. Frederick Beiser., 25–51 (New York, NY: Cambridge University Press, 1993) (Harris 1993).
57. Hegel does not here mention Fichte by his name. Instead, he refers to the post-Kant "transcendental idealism."
58. Hegel, *Lectures on the History of Philosophy*, Vol. 3, 483.
59. G. W. Hegel, *The Difference between Fichte's and Schelling's System of Philosophy*, trans. H. S. Harris and Walter Cerf (Albany, NY: State University of New York, 1977), 126. Relatedly, Hegel goes on to say that "the basic character of Fichte's principle ... is that the Subject-Object steps out of its identity and is unable to establish itself in it because the different [i.e., pure and empirical consciousness] gets transposed into the causal relation." Consequently, "the principle of identity does not become principle of the system; as soon as the formation of the system begins, identity is abandoned" (ibid., 155) (Hegel 1977).
60. Hegel, *Lectures on the History of Philosophy*, Vol. 3, 481.
61. George di Giovanni, "Introduction," xxxiv.
62. Friedrich W. J. von Schelling, "On the True Concept of Philosophy of Nature and the Correct Way of Solving its Problems," trans. Judith Kahl and Daniel Whistler. Source: www.academia.edu/7759416. Last accessed: 1/13/2013, 2017.
63. Friedrich W. J. von Schelling, *The System of Philosophy in General and of the Philosophy of Nature in Particular*, in *Idealism and the Endgame of Theory*, ed. Thomas Pfau, 139–94 (Albany, NY: SUNY Press, 1994), 141 (Schelling 1994).
64. Hegel, *Lectures on the History of Philosophy*, Vol. 3, 525–6. Differently put, "the true [dialectical] process could only be traced out by means of logic, for it contains pure thoughts; but

- the logical [dialectical] point of view was what Schelling never arrived at in his presentation of things” (ibid., 518).
65. The idea to begin philosophy with *being* was influentially, but not originally, defended by Friedrich Hölderlin in his brief 1795 essay, “On Judgement and Being.” Friedrich Hölderlin, “Judgment and Being,” *Graduate Faculty Philosophy Journal* 11, no.1 (1986): 17–8 (Hölderlin 1986).
 66. G. W. F. Hegel, *The Phenomenology of Mind*, trans. James B. Baillie (Mineola, NY: Dover, 2003), 21 (Hegel 2003).
 67. Herbert Marcuse, *Reason and Revolution: Hegel and the Rise of Social Theory* (Boston, MA: Beacon Press, 1960), 123 (Marcuse 1960).
 68. Houlgate, *The Opening of Hegel’s Logic*, 31, 45, 46, 63, 64; also see 117–23, 273–4.
 69. Friedrich W. J. von Schelling, *On the History of Modern Philosophy*, trans. Andrew Bowie (Cambridge, UK: Cambridge University Press, 1994), 138 ff. On a similar note, Hans-Georg Gadamer asks, “Why is the [Hegelian] system of concepts something in motion and moving itself and not something which thought merely runs through?” In other words, “how in the *Logic* a [self] movement of ideas could begin and continue”? Gadamer initially suggests that Schelling’s question results from misunderstanding Hegel’s “transcendental logic.” However, his correction winds up relying upon what Hegel or “one” can or “cannot” think. Hans-Georg Gadamer, *Hegel’s Dialectic: Five Hermeneutical Studies*, trans. P. Christopher Smith (New Haven, CT: Yale University Press, 1976), 85, 87. In other words, Gadamer simply abandons the problem (Gadamer 1976; Schelling 1994).
 70. Kierkegaard, *Concluding Unscientific Postscript to the Philosophical Crumbs*, 95.
 71. We deduce pure being, says Hegel in a Fichtean fashion, with the “freedom that abstracts from everything” (EL 124).
 72. This is the way Maker basically attempts to solve the present problem. William Maker, *Philosophy Without Foundations: Rethinking Hegel* (Albany, NY: SUNY Press, 1994), 71–93 (Maker 1994).
 73. Klaus Hartmann, “Hegel: A Non-Metaphysical View,” in *Hegel: A Collection of Critical Essays*, ed. Alasdair MacIntyre, 101–24 (Notre Dame, IN: University of Notre Dame Press, 1976), 105–6 (Hartmann 1976).

74. According to Feuerbach, Hegel can neither “step outside of the Idea” nor does he ever “forget it.” *SL*’s “end is its beginning and its beginning its end.” Ludwig. Feuerbach., “Towards a Critique of Hegelian Philosophy,” in *The Young Hegelians: An Anthology*, ed. Lawrence S. Stepelevich, 95–128 (Cambridge, UK: Cambridge University Press, 1983), 111–2. A similar criticism of Hegel was given by Friedrich A. Trendelenburg in “The Logical Question in Hegel’s System,” *The Journal of Speculative Philosophy* 5, no. 4 (1871): 349–59, 358; Hyppolite’s reading of *Logic* also coincides with these criticisms: In Hegel, “the totality is always immanent, the beginning indicates the end, only the end allows us to comprehend retrospectively the beginning. There is no other way to conceive Hegelian Logic.” Hyppolite, *Logic and Existence*, 161–2. Also see Theodor W. Adorno, *Negative Dialectics*, trans. E. B. Ashton (London: Routledge, 1973), 159; Adorno, *Hegel: Three Studies*, 93–4 (Adorno 1973; Trendelenburg 1871; Feuerbach 1983).
75. Houlgate, *The Opening of Hegel’s Logic*, 56–9.

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PART I

Determinateness (Quality)

Being

Hegel occasionally gives the same title both to a chapter and to one of its sections or subsections. “Being” is the first chapter of “The Doctrine of Being,” which is divided into three sections. The first section is also called “Being,” though, given its content, “Pure Being” seems more apt. The subsequent two sections of this chapter are titled “Nothing” and “Becoming.”

The main idea proposed in this chapter is that both pure being and nothing refer to the complete absence of determination, and are the same for this reason. Consequently, they vanish into each other. In vanishing, being ceases to be, and nothing comes to be. This mutual vanishing is becoming, which shows a sign of distinction between being and nothing. This distinction leads to a contradiction, which causes becoming or vanishing to vanish. The result is a stable equilibrium in which being and nothing are preserved in a simple unity. This unity is determinate being. We are now to see how this happens logically, according to Hegel.

BEING

Hegel has already informed us that the system of logic, if it is to be truly scientific, must necessarily begin with pure being.¹ Once again, the reason for this is that the beginning must be pure immediacy, and so presuppositionless. Accordingly, “the beginning ... is to be taken as an unanalyzable ..., simple, unfilled immediacy, and therefore *as being*, as

complete emptiness" (SL 70/75/75).² Although Hegel denies this, this statement itself constitutes a presupposition.

Since a complete sentence would imply some sense of determination, Hegel begins with an incomplete sentence: "*Being, pure being*, without any further determination." As such, pure being is "indeterminate immediacy" (SL 77/82/82). This description of pure being implies that being is indeterminate immediacy on account of lacking further determination. On its own, this is an acceptable description of being as such. However, Hegel wants to reduce being to nothing, and this reduction depends on describing pure being as the *utter lack* of determination, and not simply as the absence of *further* determination.

Hegel adds that pure being "[1] is equal only to itself and also [2] not unequal in contrast to another." This is because (1) it has neither any "distinction within itself" nor (2) "any outwardly" distinction. Thus pure being (1) is self-identical, for it "would not be ... [this] purity if it contained any determination or content which could be distinguished in it." This is a valid statement. However, it is not true that (2) pure being cannot be distinguished "from an other" (SL 77–8/82/82). By virtue of being "pure" or "simple," being is distinguishable both from a complex being and sheer nothing. Indeed, Hegel's description of pure being is an attempt to distinguish it from more determinate, complex being.

However, and once again, Hegel's aim here is to reduce pure being to sheer nothing. The first decisive step in this direction consists of incorrigibly ambiguous phrases: "There is *nothing* to be 'intuited'" in pure being; or, this "intuiting" itself "is pure," and so is "only ... empty thinking" (SL 78/82/82).

What Hegel means to say here is that, try as we may, pure being cannot be thought of or intuited, for "there is *nothing*" in it or about it that could be intuited. This, of course, is an absurd claim, which is debunked by the very fact that Hegel is here thinking about it. As it turns out, this unjustifiable claim is the source of Hegel's deduction of *nothing*. In other words, since "there is *nothing*" in it or about it that could be intuited, our "empty" intuition amounts to the thinking of nothingness. But, as Feuerbach rightly and rhetorically asks, "are simplicity and [self-] sameness ... not real determinations? Do I really think nothingness when I think simple [self-] sameness?"³ At any rate, Hegel's unjustifiable verdict is that pure being has no determination whatsoever: "it is pure indeterminateness and emptiness," and therefore "is in fact *nothing*—nothing more nor less than *nothing*" (SL 78/82–3/82).

Some of his able interpreters have tried to rescue Hegel from this deeply problematic start. According to John McTaggart, it is “clear” that Hegel’s equation of pure being and nothing does not amount to “the denial of Being.”⁴ A compatible reading is proposed by Herbert Marcuse, who argues that Hegel’s pure being refers to “the predicate of everything,” and so “does not point to an actual [specific] thing.” Accordingly, pure being is “nothing” in the sense that it “is no [specific] thing.”⁵ Others offer similar interpretations.⁶ However, as Stephen Houlgate rightly notes, these interpretations do not coincide with Hegel’s present intentions, for he maintains that “the very indeterminacy of being *itself* means that logically being is not even the being it is.”⁷ After all, Hegel says explicitly that, “because being is devoid of all determination [*Bestimmungslose*], it is ... not (affirmative) being but nothing” (*SL* 100/104/99).

Houlgate thinks Hegel’s reduction of pure being to nothing is logically defensible. In my view, his defense of Hegel in this regard ultimately depends on repeating—or taking for granted—Hegel’s own definition of pure being. In other words, his argument is mainly that, “insofar as ... *pure* being ... is so utterly indeterminate,” it “logically vanishes ... into nothing.”⁸ Walter T. Stace proposes a similar explanation: “being has no character and is utterly empty ...; it is therefore equivalent to *nothing*.” Therefore, “because [pure] being is by its very definition the absence of all determination, it is nothing.” He then goes on to confuse this meaning of pure being with incomplete predication, such as “S is –.”⁹ In so doing, Stace mistakenly equates the unstated predicate with nothing, and this nothing with the copula (i.e., is or being). The bottom line is that the legitimation of Hegel’s equation of pure being with nothing ultimately depends on accepting the definition of pure being as “the absence of all determination.” Once we accept this definition, the conclusion that pure being is the same as nothing follows. However, the definition is unacceptable.

It has been plausibly pointed out before that Hegel could have as easily begun his logic with nothing, rather than with pure being.¹⁰ This is true in the sense that Hegel’s pure being has turned out to be precisely nothing. However, this observation highlights an important problem, which is inherent in Hegel’s beginning: one cannot begin with sheer nothing, for beginning itself is a determination. In short, the claim that what we begin with is nothing, or turns out to be nothing, is also indefensible. Perhaps this is the reason why Hegel does not explicitly claim that he begins with nothing, even if this has turned out to be the case.

NOTHING

Hegel now proceeds to give the same description of pure being to pure nothing: “*Pure nothing* ... is simply equality with itself, perfect emptiness, lack of determination and content—undifferentiatedness in itself” (SL 78/83/82). Once again, it is flatly illogical to treat the “absence of all determination” as “equality with itself,” for self-equality or identity is a determination. Otherwise, and this is a big otherwise, this definition of nothing is acceptable.

As Plato rightly reminds us, there is no “way of describing [or conceiving] ... that which just simply is not” without “attributing being” to it.¹¹ Hegel similarly says that “to intuit or think nothing has ... a meaning ...; thus nothing *is* (exists) in our intuiting or thinking.” What Hegel ignores here is that the nothing we have thought about is no longer sheer nothing. Moreover, he goes on to claim that “to intuit or think nothing” is the same as “empty intuition and thought itself” (SL 78/83/82). At best, this is a very ambiguous statement, which seems to imply that *nothing* is meaningless, or that it has an empty meaning. Of course, the *intuited* “nothing” has a meaning; it refers precisely to complete absence of determination, though it is itself a determination of thought.

However, Hegel maintains that the intuition of nothing is “the same empty intuition or thought as pure being.” Now he seems to be saying that both nothing and pure being are the same as empty intuition or thought. This absurdly implies that intuition or thought could be nothing, rather than being the thought of nothing (or of pure being). More charitably read, he means to say that the thought of nothing is the same as the thought of pure being, in the sense that they both have the same meaning. Thus we reach the following ambivalent conclusion: “nothing is ... [1] the same determination, or [2] rather lack of determination, and is therefore altogether the same as what pure *being* is” (SL 78/83/82).

This is yet another sloppy reasoning. In order to be the same (assuming that they could even be the same), both being and nothing would have to be “the same determination.” But this would mean that they are not the total absence of determination Hegel says they are. In order to avoid this problem, Hegel adds that they are the same “lack of determination.” However, to lack determination is to lack both being and meaning. Under this assumption, logic itself vanishes. But Hegel continues...

Hegel maintains that nothing has meaning, even though it lacks determination. If we “so wished,” we could express it “merely by ‘not’” (SL 79/84/83). On the assumption that nothing and being are the same, Hegel’s present assertion amounts to the following proposition: *is* and (*is*) *not* are just the same, and thus have the same meaning. This further implies that it makes no difference “whether this house is or is not.” Hegel flatly denounces this implication on the ground that it references something concrete (i.e., “this house”). The use of *is* and *not* as the predicates of a concrete something, he says, “completely changes” the meaning they currently have, for we are here dealing with “the pure abstractions of being and nothing” (SL 82/87/85–6).

Hegel thus claims strangely that, as pure abstractions, being (*is*) and nothing (*not*) have the same meaning, or the same lack of meaning, though this is not true when they predicate something concrete. Moreover, “pure abstractions” must mean “total abstractions” in which no determination or distinction whatsoever is found.¹² For this reason, and in this sense, “*pure being* and *pure nothing* are ... the same” (SL 78/83/82).

Hegel’s equation of pure being and sheer nothing is simply indefensible, as his contemporaries made it known. He was well aware of this objection, against which he hurls the following insult: “If the result that being and nothing are the same appears striking or paradoxical in itself, then no further consideration needs to be given; rather should we be astonished by this astonishment, which is new to philosophy, and forgets that there are entirely different determinations in this science [of logic] from those found in ordinary consciousness” (SL 81/85/84). Hegel should have added that he alone possesses such an extraordinary consciousness.

In order to be able to move forward, I will now cease to question the validity of Hegel’s conclusion, which, again, is that “being and nothing are the same.”

BECOMING

Hegel’s discussion of *becoming* occurs in three subsections: “Unity of Being and Nothing,” “Moments of Becoming: Coming-to-be and Ceasing-to-be,” and “Sublation of Becoming.” This triadic division is meant to reflect the development and transcendence of the concept of becoming in three steps, namely, immediacy, (contradictory) determination, and sublation in which becoming gives way to *determinate being*.

UNITY OF BEING AND NOTHING

Hegel now takes it for granted that “*pure being* and *pure nothing* are ... the same.” But, says he, in isolation each term is untrue. Presently, this simply means that they cannot be thought of independently. Thus their truth is that “being has passed over into nothing and nothing into being” (SL 78–9/83/82).

This statement introduces another complication that will remain a problem throughout this section: How could there be becoming if being and nothing are the same? Or, if there is becoming, how could they be the same? In other words, by reducing pure being and nothing to the absence of determination, Hegel has eliminated the ground for their immanent distinction, and so for their transition into each other. Consequently, he cannot speak of transition or becoming,¹³ unless he introduces some sense of distinction between being and nothing.

Hegel solves this problem with an abrupt declaration: “The truth is that ... they are absolutely distinguished” (SL 79/83/83). Thus we now get the puzzling result, which states that two indistinguishable, equally vacuous terms are absolutely distinct. Yet, “they are unseparated and inseparable,” meaning that they are necessarily in unity (hence the title of this subsection). Here, Hegel is simply presupposing becoming, which is the unity of being and nothing (more precisely, not-being). In becoming, each term “immediately *vanishes in its opposite*.” The unstated reason for this mutual vanishing seems to be that, as soon as one thinks of pure being, it slips into nothing, and vice versa. Thus the “truth” of pure being and nothing is not that they are absolutely distinct; rather, it is “this movement [*Bewegung*] of the immediate vanishing of the one in the other.” This immediate vanishing is precisely “*becoming* [*Werden*],” which is “a movement in which both [being and nothing] are distinguished, but by a distinction which has been immediately resolved” (SL 79/83/83). In other words, “the true situation is that being as such is not firm and ultimate, but rather something that overturns dialectically into its opposite—which, taken in the same immediate way, is *nothing*” (EL 139).¹⁴

What is implied here is that their “distinction,” which we have introduced externally, is not yet conceivable, and so it spontaneously or “immediately” vanishes. This notion problematically implies that there is no becoming either, or it too is inconceivable, for becoming depends on the assumption that being and nothing are its distinct moments. But there is a Hegelian solution to this problem, which is another

double-speak: “*becoming* ... [is] the true result,” the “whole,” “which consists ... in this movement [in which] pure being remains immediate and simple ..., as does pure nothing.” In other words, “they are distinguished, but their distinction equally sublates [cancels] itself, and so is *not* [a distinction]” (SL 90/95/91–2).

Hegel ultimately thinks that the distinction between being and nothing is “impermissible” at this stage of logic. “*Those who wish to insist that being and nothing are distinct may also state in what ... [the distinction] consists,*” declares Hegel. Before we may even think about stating their distinction, Hegel reminds us of the Hegelian prohibition: “If being and nothing had any determinateness that distinguished them from each other, then ... they would be determinate being and determinate nothing [not-being], not the pure being and pure nothing that they still are presently. Their difference is therefore completely empty; each of them is indeterminate in the same way;” each is the same indeterminacy (SL 90–1/95/92; also see EL 139).

Here, by challenging his opponents, Hegel simply tries to hide his own problems. A main problem in this context is that he has no right to speak of becoming unless he admits that being and nothing are distinct determinations. At any rate, he insists that their distinction is “unsayable,” for it “does not exist in themselves but only in a third, [namely] in subjective *opinion* [*im Meinen*].” Thus, since the distinction is a “form of subjectivity,” it “does not belong to the present [immanent] exposition.” Should we, then, abandon the category of becoming? We cannot, reasons Hegel, for “the third, in which being and nothing have their subsistence, must also occur here.” In fact, “it has already occurred; it is *becoming*” (SL 91/95/92). The conclusion we must draw here is that Hegel simply presupposes *becoming*.¹⁵

THE MOMENTS OF BECOMING

Hegel takes it for granted now that becoming is a “*determinate* [*bestimmte*] unity in which both being and nothing *are*.” Since the presence of such a “*determinate* unity” depends on the presence of some sense of distinction and relation between being and nothing, he also takes it for granted that these are the distinct moments of becoming. As it turns out, instead of being *a* unity, “becoming ... contains being and nothing as two such [distinct] unities,” each one of which is assumed to be “a unity of being and nothing.” One of the unities “is being [both] as immediate and as relation

to nothing, and the other is nothing [both] as immediate and as relation to being" (SL 108/112/105). This conclusion easily follows from the definition of becoming as the unity of being and nothing, which are each other's relation (even though we are not supposed to have *relation* at this stage of logic).

Hegel maintains next that "the determinations in these [two] unities have unequal [i.e., distinct] values," which means that "becoming is ... in a double determination." How can two unities be both "of unequal values" and also contain the same two indistinguishable moments, namely, being and nothing? Hegel's answer is the following: "In one unity, *nothing* ... goes over into [being] ...; in the other ..., the determination starts from being which goes over into nothing." The former is "*coming-to-be* [*Entstehen*]" and the latter "*ceasing-to-be* [*Vergehen*]" (SL 108–9/112/105–6).¹⁶ Obviously, this distinction is externally imposed by Hegel, who has now arbitrarily introduced two distinct considerations, or points of departure, into becoming. In fact, the consideration of two opposite or unequal processes is repeated several times throughout "The Doctrine of Being." In each case, the opposition between the said processes is resolved with a simple solution, which is that they are both the same becoming.

This is also the case here. According to Hegel, as two "differentiated directions," these processes "penetrate and paralyze each other." This simply means that the said distinction immediately collapses, for "both are the same" in the sense that both are "*becoming*." This, he notes, is not a reciprocal interaction of the two separate movements, for they are not "externally" related to each other. Rather, "each sublates itself in itself and is the opposite of itself." In other words, by "*ceasing-to-be*, being passes over into nothing." However, "nothing is equally the opposite of itself, a transition into being, coming-to-be" (SL 109/112/106).

Even though this statement fails to describe the two processes as indistinguishable, Hegel now assumes that their distinction is sublated. To put this differently, the sublation of their distinction is obtained only from the claim that "each sublates itself in itself and is the opposite of itself." This claim simply ignores Hegel's own (unwarranted) assumption that these two sublations occur in "differentiated directions." At any rate, rather than a simple becoming, we now have sublated becoming.

SUBLATION OF BECOMING

Whereas the sublation considered in the previous subsection was, so to speak, “an occurrence” within becoming itself, the sublation we now have before us concerns the sublation of becoming, that is, its transition to determinate being (*Dasein*).

The first sublation is now called “equilibrium.” This equilibrium is the result of the sublation or cancellation of the (asserted) distinction between “coming-to-be and ceasing-to-be.” The result of the first sublation, or the cancellation of their distinction, then, is “*becoming* itself.” Thus becoming “settles into a calm unity,” for the distinction between its moments has vanished. However, Hegel at once leaps to the conclusion that this vanishing “is the vanishing of becoming or the vanishing of the vanishing itself.” In other words, “becoming is a ceaseless restlessness that settles into a stable result” (*SL* 109/113/106), which, upon settling into a stable result, is no longer becoming or vanishing.

As it turns out, becoming is self-contradictory, and this is why it destroys itself. On the one hand, “becoming only *is*, in so far as ... [being and nothing] are distinguished” in it. On the other hand, being and nothing are indistinguishable (*SL* 91/95/92). In other words, “becoming is the vanishing of being into nothing and of nothing into being ...; but at the same time [the presence of becoming] ... is due to their distinction.” Thus “becoming is, in itself, contradictory, because what it unites within itself [namely, distinction and non-distinction] are opposed [determinations]; but such a union destroys itself” (*SL* 109/113/106).¹⁷

Alas, the “contradiction” is imagined by Hegel, who should really be saying the following. Becoming depends on the distinction of its moments; since pure being and nothing are indistinguishable, it follows that there is as yet no becoming. Thus, rather than destroying itself, the becoming we have imagined earlier is unjustified. Moreover, even if we grant that becoming is self-contradictory, and destroys itself for this reason, it is not at all clear how Hegel obtains “a stable result,” namely, “*determinate being* [*Dasein*],” in which being and nothing are “preserved” as distinct moments (*SL* 109/113/106). In other words, Hegel also presupposes determinate being. As we are about to see, he deduces the said distinction and stability from the definition of determinate being, and not from becoming.

REMARK

This remark initially appears to be a clarification of the speculative meaning of “to sublimate [*Aufheben*],” though it quickly turns into a justification of determinate being by definitional fiat.

Hegel first observes that “to sublimate” has a double meaning: “it means to preserve, to maintain, and, at the same time, it means to cease, to ... end.” In other words, that which is sublated “is not thereby destroyed;” it “has only lost its immediacy,” and so is preserved, as mediated, in the “*result*.” Thus we now have the unjustified conclusion that being and nothing, since they have been sublated, are preserved in determinate being. He then admits that “this more particular determination is ... reflected” externally (*SL* 110-1/114/107). Yet, we take it as an immanently sublated result.

“The clearer meaning and expression which being and nothing obtain, now that they are *moments* [of determinate being], emerges from the consideration of determinate being as the unity in which they are preserved.” Hegel inadvertently admits here that the “more precise meaning” of these two moments is “ascertained from the consideration [or definition] of determinate being.” As opposed to becoming, “determinate being” is “a differently determined unity.” Consequently, being and nothing are “differently determined moments” in determinate being, and thus no longer have “the abstract meaning” they had in becoming (*SL* 111/115/107–8). In short, determinate being is basically derived both from its own definition and from the definition of sublated something.

In conclusion, as Charles Taylor also maintains, the “arguments” Hegel has given thus far “are unconvincing.” However, Taylor thinks that this verdict is mainly applicable to Hegel’s derivation of becoming, which “is not as solid as that of *Dasein*.” According to Taylor, the more “solid” derivation of the latter is based on the following reasoning: the “notion of pure being frustrates its own purpose” in the sense that “we cannot characterize reality with it alone.” Consequently, “we are forced to a notion of being as determinate, as having some quality and not another.” In short, Hegel maintains that “being can only be thought as determinate.”¹⁸

Taylor’s assessment is not entirely groundless, though it ultimately ignores the fact that Hegel thinks “determinate being emerges [dialectically or immanently] from becoming” (*SL* 112/116/109). In other words,

Hegel does not think that determinate being emerges as a consequence of abandoning the previous categories, though some of his claims imply that he does. As Houlgate points out, according to Hegel, “sheer indeterminacy *does* generate determinacy purely by itself.”¹⁹ What Houlgate overlooks in turn is that Hegel fails to make a convincing case for this claim.

NOTES

1. According to Adorno, “the choice of a starting point, of what comes first, is a matter of indifference in Hegel’s philosophy.” Theodor W. Adorno, *Hegel: Three Studies*, trans. Shierry W. Nicholsen (Cambridge, MA: The MIT Press, 1994), 12. It is rather clear that this is not Hegel’s view (Adorno 1994).
2. The three page numbers included in the citation reference the following three texts: G. W. F. Hegel, *Wissenschaft der Logik. Erster Theil: Die Objektive Logik. Erste Abtheilung: Die Lehre Vom Seyn*, ed. Leopold Von Henning (Berlin: Duncker and Humblot, 1833) (Hegel 1833); G. W. Hegel, *Wissenschaft der Logik I. Erster Teil: Die Objektive Logik. Erstes Buch*, ed. Eva Moldenhauer und Karl M. Michel (Frankfurt am Main: Suhrkamp Verlag, 1969) (Hegel 1969b); *Hegel’s Science of Logic*, trans. A. V. Miller (Amherst, NY: Humanity Books, 1969) (Hegel 1969a).
3. Ludwig Feuerbach., “Towards a Critique of Hegelian Philosophy,” in *The Young Hegelians: An Anthology*, ed. Lawrence S. Stepelevich, 91–124 (Cambridge, UK: Cambridge University Press, 1983), 123–24, 108–112 (Feuerbach 1983).
4. Instead of denying being altogether, adds McTaggart, Hegel proposes “the absence of all [further] determination” of being, and this “is just what we mean by Nothing.” In McTaggart’s view, “the absence of all determination” means the absence of any predication. In this sense, the absence of determination really means “we are affirming nothing else” but pure being. John McTaggart, *A Commentary of Hegel’s Logic* (Cambridge, UK: Cambridge University Press, 1910), 15–16 (McTaggart 1910).
5. Herbert Marcuse, *Reason and Revolution: Hegel and the Rise of Social Theory* (Boston, MA: Beacon Press, 1960), 129 (Marcuse 1960).
6. See Charles Taylor, *Hegel* (Cambridge, UK: Cambridge University Press, 1977), 232 (Taylor 1977). John Burbidge, *On Hegel’s Logic: Fragments of a Commentary* (Atlantic Highlands, NJ: Humanities Press, 1981), 39–40 (Burbidge 1981). Rosen also defends this view. Stanley Rosen, *The Idea of Hegel’s Science of Logic* (Chicago, IL: The University of Chicago Press, 2014), 113.

7. Stephen Houlgate, *The Opening of Hegel's Logic: From Being to Infinity* (Lafayette, IN: Purdue University Press, 2006), 278 (Houlgate 2006).
8. Ibid., 264.
9. Walter T. Stace, *The Philosophy of Hegel* (New York, NY: Dover, 1955), 135–136 (Stace 1955).
10. Cf. Cynthia Willett, “The Shadow of Hegel’s *Science of Logic*,” in *Essays on Hegel’s Logic*, ed. George di Giovanni, 85–90 (Albany, NY: SUNY Press, 1990), 88 (Willett 1990); George P. Cave, “The Dialectic of Becoming in Hegel’s *Logic*,” *The Owl of Minerva* 16, no. 2 (1985): 145–60, 159 (Cave 1985).
11. Plato, *Sophist*, trans. Nicholas O. White (Indianapolis, IN: Hackett, 1993), 238d–239c (Plato 1993).
12. According to Stace, Hegel’s pure being is “the highest possible abstraction” and, as such, it excludes “all determinations of any kind.” Therefore, it is “utterly empty,” and so is the same as pure nothing. Stace, *The Philosophy of Hegel*, 135. At least on one occasion, Hegel seems to propose this view: pure being “is the *pure abstraction*, and hence it is *absolutely negative*, which when taken immediately, is *nothing*” (*EL* 136). However, he qualifies that what we have here is “not a mediated lack of determination, not the sublation of all determinacy” (*EL* 137). What this means is that the beginning of logic is made with the unmediated, not-sublated lack of determinacy. It is utterly *abstract*, rather than being the result of total *abstraction* from everything. Thus Pippin rightly claims that Hegel “explicitly” rejects “abstracting from every concrete determination ... a featureless ... being.” Robert B. Pippin, *Hegel’s Idealism: The Satisfaction of Self-Consciousness* (Cambridge, UK: Cambridge University Press, 1989), 184 (Pippin 1989). However, Hegel also entertains the thought that “one could abstract from everything [from everything], and when everything has been abstracted, *nothing* remains” (*SL* 100/104/99). This is an unthoughtful consideration, which implies that being and nothing are distinct, for the latter results from eliminating the former. In *EL*, he gives us another unthoughtful version of this total abstraction: “When we consider the entire world, and say simply that everything is, and nothing further, we leave out everything determinate, and, in consequence, have only absolute emptiness instead of absolute fullness” (*EL* 140–1). But, it must be reiterated, Hegel is not committed to this mediated abstraction.
13. Hegel informs us that “transition [*Übergehen*]” might be an inappropriate expression to be used synonymously with “becoming [*Werden*]” (*SL* 92/96/93). The implication here is that we are not yet concerned with real change between our terms, for such change would presuppose difference between them. However, Hegel neither can nor does avoid using the term “transition.”

14. All quotations and citations from *EL* are from G. W. F. Hegel, *The Encyclopaedia Logic: Part I of the Encyclopaedia of Philosophical Sciences with the Zusätze*, trans. T. F. Geraets et al. (Indianapolis, IN: Hackett, 1991) (Hegel 1991).
15. In the final analysis, as Cave aptly writes, “Hegel effects the transition ... of Being and Nothing ... into one another without first explicating the other dialectical component of this transition, namely, the difference of Being and Nothing... Consequently, the transition of Being into Nothing and Nothing into Being [which transition is Becoming] is itself ... unproven.” Cave, “The Dialectic of Becoming in Hegel’s *Logic*,” 160. For a similar criticism, see Hans-Georg Gadamer, *Hegel’s Dialectic: Five Hermeneutical Studies*, trans. P. Christopher Smith (New Haven, CT: Yale University Press, 1976), 87 (Smith 1976); Stanley Rosen, *The Idea of Hegel’s Science of Logic* (Chicago, IL: University of Chicago Press, 2014), 136–137 (Rosen 2014). However, according to Houlgate, becoming “is not just taken for granted by Hegel but is what being and nothing both turn out logically [immanently] to be.” Houlgate, *The Opening of Logic*, 287.
16. Hegel similarly says in *EL* that “being is the passing into nothing and ... nothing is the passing into being” (*EL* 144).
17. As McTaggart clarifies, Hegel maintains here that “Being and Nothing only exist in Becoming as disappearing moments. But Becoming exists only in so far as they are separate [or distinct moments], for, if they are not separate [or distinct], how can they pass into one another?” McTaggart, *A Commentary on Hegel’s Logic*, 17. Also see Houlgate, *The Opening of Hegel’s Logic*, 293. However, these authors do not note that the so-called contradiction is false.
18. Taylor, *Hegel*, 232–233. Pippin offers a similar interpretation: Hegel deems the first three categories logically “impossible,” for they are collectively no more than “self-defeating thought of anything at all.” Thus Hegel ultimately “takes himself as providing a rational justification for necessarily thinking of being as a determinate or qualitative being, specifiable by determinate properties.” Pippin, *Hegel’s Idealism: The Satisfactions of Self-Consciousness*, 189.
19. Houlgate, *The Opening of Hegel’s Logic*, 288–296.

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Determinate Being

Generally speaking, Hegel's dialectic is concerned with the mode in which being is determined through its negation. Although there is no scholarly consensus on what Hegel means by it, "determinate negation" is commonly assumed to express the general mode of determining Hegel tries to explicate.¹ However, it is clear to me that determinate negation involves different modes of determining in Hegel's logic. Ultimately, determinate negation is a contradiction, which produces scenarios in which affirmation and distinction spontaneously vanish. Indeed, *vanishing* is the ultimate buzzword of Hegel's doctrine of being.

In this chapter, Hegel attempts to explicate the basic structure and immanent development of determinate being in three sections: "Determinate Being as Such," "Finitude," and "Infinity." The advances made along the way entail the *qualitative* determination of being. The form of negation entailed in this mode of determining may be called "self-othering" or "other-becoming." As we will see, otherness repeatedly emerges and spontaneously vanishes into immediate *identity*, which Hegel problematically also calls "unity." At last, this mode of determining itself vanishes. Consequently, we reach the conception of being as *being-for-itself*. In the next chapter, Hegel discovers the quantitative mode of determining in the dialectic of being-for-itself.

DETERMINATE BEING AS SUCH

“Determinate Being as Such” has three dialectical stages of its own. First, it is *determinateness*. Second, “determinateness is to be distinguished as *quality*.” However, as quality, determinate being shows itself to be the unity of “*reality and negation*.” As these two “determinatenesses, determinate being is equally reflected into itself.” As a consequence of this self-reflection through its two moments, determinate being as such “is posited as *something*, [as *a*] determinate being [*Daseiendes*]” (SL 112/116/109).² These three stages are presented under the following subheadings: “Determinate Being in General,” “Quality,” and “Something.”

Determinate Being in General

As we have presumably seen, “determinate being emerges from becoming.” Becoming has vanished with the vanishing of its contradiction and instability, and has consequently left in its wake a more stable, determinate being, which presently is still “the simple one-being [*Einssein*] of being and nothing.” Due to “this simplicity, it has the form of an *immediate* [being].” Now, and somehow, “mediation, becoming, lies behind,” and the immediate, abstract “determinate being [*Dasein*] appears ... as a first.” The “ensuing development will issue” immanently from it (SL 112–3/116/110).³

In other words, the more concrete determinate being currently exists only “*for us in our reflection*; it is not yet *posited* as ... [the concrete unity of distinct moments] in its own self.” Hegel assures us that the aim of drawing attention “to the distinction” between the abstract determinate being (the immediate unity of being and non-being) and the concrete determinate being, in which these moments exhibit distinction, is to “facilitate ... the understanding,” to “explain or indicate” to it “in advance the course which will appear in the [ensuing dialectical] development.” Thus we must not take these “unjustified allegations,” which are “prompted by [external] reflection,” as presupposed “grounds and foundations” for the ensuing development (SL 113–4/116–7/110). We are now to see how this simple, immediate unity explicates and further determinates itself immanently.

Quality

Hegel repeats here that, “due to the immediacy of determinate being in which being and nothing are one” simple being, being and nothing “do not extend beyond each other; so far as determinate being is present [*seiend*], so far is it non-being [*Nichtsein*]; so far is it determinate [*bestimmt*].” Thus being is thoroughly infused with non-being. (Hegel confusingly uses “nothing” and “non-being” interchangeably in this context.) This unity, Hegel informs us, is not the unity of “the universal” and “the particular,” for these terms imply distinction, which we do not as yet have. This simple “unity of non-being with being will henceforth constitute the ground [*Grunde*], the truth [*Wahre*] of all ensuing determinations.” Moreover, this simple, immediate unity is called “determinateness [*Bestimmtheit*]” (SL 114/117–8/111).

As it turns out, when considered just by itself, “determinateness ... is *quality*, which is wholly simple and immediate.” What we have here is not a specific quality but “quality as such.” Clearly, quality has not been deduced immanently, for “determinateness” does not imply quality, even though the former can be abstracted from the latter. As Hegel admits, “*determinateness* in general is the more universal [or general], which can equally be determined as quantity” and so on (SL 114/118/111). This means that quality is not a necessary result. More importantly, Hegel describes quality as “wholly simple and immediate,” which description problematically renders quality identical with determinateness.

Hegel now adds that quality “is to be posited in the determination of nothing in the same way” as it was posited in the determination of being (SL 115/118/111). In other words, since presently nothing is identical with being, which is presently identical with determinateness, it follows that nothing is to be posited also as quality. Given what Hegel has told us thus far, this positing basically posits the same thing as quality twice, and so is superfluous. In other words, since being and nothing (non-being) are in a simple unity, a distinct, negating, determining quality cannot be posited here.

Hegel now needs to find a way to introduce some sense of distinction and negation. As “reflected,” he says, this nothing is determined as distinct from being. “Nothing, as thus the determinate [distinct] element of determinateness, is a *negation* [*eine Verneinung*]” (SL 115/118/111). According to Stephen Houlgate, “Hegel’s point here is that, when quality

is thought and posited ‘in the determination of nothing,’ a difference is introduced between the negative and affirmative determinateness of quality.”⁴ I am not sure how such a difference is introduced in a determination in which the affirmative being and the negative nothing are assumed to be indistinct, and in which both being and nothing are posited identically as quality as such. In my view, Hegel has been presupposing the said distinction all along, though he would have us believe that it has emerged immanently. Thus it is the presupposed distinction that explains the negative and affirmative determinateness of quality as such.

At any rate, quality now entails both being and non-being. When “distinguished as the affirmatively present *being*,” quality “is *reality*.”⁵ On the other hand, as merely the negatively present moment, quality “is *negation* [*Negation*] in general” (SL 115/118/111); it is the negation of the affirmative moment. For the time being, then, quality has reached its second dialectical step in which it has split into *reality* and *negation*.⁶ The distinction between reality and negation will be sublated in the next section.

Something

As we have seen, the “determinateness of determinate being ... has been distinguished as quality,” as opposed to quantity. Quality itself contains the “distinction ... of reality and negation.” The distinction between these two moments, Hegel now adds, is just as much no distinction—their distinction is “cancelled [*aufgehoben*], and so is null” (SL 119/122/114–5). This summary anticipates the ensuing dialectic, which will cancel the said distinction; *something* (*Etwas*) will emerge as the result.

In the first place, “reality itself contains negation, is determinate being, not undetermined, abstract being.” “Similarly,” adds Hegel, “negation is determinate being, not the abstract ... nothing,” for it “is here posited as ... belonging” to determinate being. In a confusing manner, he concludes that “quality is thus not at all separated [or distinguished] from determinate being [*Dasein*], which is only determinate [*bestimmtes*], qualitative being” (SL 119/122–3/115). What he means to say here is the following. First, quality contains reality and negation, which are posited as distinct but related moments of quality. As such related moments, each is a determinate being in its own right. Since quality is determined by its distinct but related moments, it proves to be a determinate being also. Thus quality and determinate being are

identical. This determinate being is supposed to be more concrete than the initial determinate being, which we have named “determinateness.”

Hegel assures us that the foregoing “sublation [i.e. nullification] ... is more than ... an external removal ... of the distinction” between reality and negation, which nullification then gave us the identity of quality and determinate being. Presumably, we now have the unity of the three stages of the logical: “[the immediate] determinate being in general, distinction in it, and sublation of this distinction.” In the third stage, with the “dissolution of distinction,” determinate being is “equal to itself,” and so is “the simple oneness [*Einfachheit*] of determinate being,” though what we have here as a result of this sublation is a “mediated” simplicity. In short, this simplicity, because it is a “sublated being of the distinction” in it, is determinate being’s “own” determination and simplicity (*SL* 119–20/123/115). Hegel’s proof for this so-called immanent sublation of distinction is reducible to the aforementioned assurance that the distinction is not omitted externally. As I see it, the said distinction is introduced and omitted externally.

Consequently, adds Hegel abruptly, “determinate being [*Dasein*] is *determined being* [*Daseiendes*], *something* [*Etwas*]” (*SL* 120/123/115). According to Giacomo Rinaldi, Hegel’s *something* is “nothing more than a quality, *excluding* from itself ‘another’ quality.”⁷ In my view, this is incorrect, for Hegel has included the “other” quality (negation) in determinate being, which has now become something within itself (*Insichsein*); or, as a consequence of the mediated identity of the moments of quality (determinate being) with itself, it is now called “something.” For this reason, I agree with Houlgate who also objects to Rinaldi’s claim on similar grounds. However, Houlgate uncritically maintains that something is the “logically necessary” result of the self-sublation of the moments of determinate being.⁸ In my view, Hegel has failed to demonstrate such immanent logical necessity.

Another problem with Hegel’s conception of something is that it is indistinguishable from his conception of quality, which is indistinguishable from determinate being. But, says Houlgate, “what is distinctive about something for Hegel is precisely that it is not merely determinate or negative but, as he puts it in the *Encyclopedia Logic*, ‘reflected *into itself*’.”⁹ Hegel indeed says this, but this saying only distinguishes something from the categories of the previous chapter.

Moreover, it is worth mentioning that Hegel reverses the order of his deduction in the same context to which Houlgate refers. In other words,

he deduces quality simultaneously with determinate being and something. The idea here is that “something is what it is,” or is a determinate being, “by virtue of its quality.” He then proceeds to discover reality and negation therein (*EL* 146–7).¹⁰ The problem Hegel faces here is that the quality of something, or something itself, cannot be conceived prior to its negation; nor can this negation be conceived prior to quality. In a nutshell, this problem is reducible to the problem of immanent, presuppositionless logic, and explains why Hegel goes in one direction in *EL* and quite another in *SL*.

In the remaining portion of this subsection, Hegel maintains that something “is still a very superficial determination, just as *reality* and *negation*, determinate being and its determinateness,” are “abstract determinations,” even though they are “no longer the empty being and nothing” (*SL* 120/123/115). It should be observed that Hegel here measures his dialectical advance against “the empty being and nothing,” and so against the sheer absence of determination. This leaves us in a state of indeterminacy, for it is quite difficult to discern if any advance has been made thus far, except for the insertion of new vocabulary.

FINITUDE

Hegel divides this section into three subsections: “Something and an Other,” “Determination, Constitution, and Limit,” and “Finitude.”

Something and an Other

In the previous section, says Hegel, he has considered the “moments of ... the development” of “*determinate being* in general.” These moments are “quality and something, [which] equally have an affirmative determination.” He should have said that they are thus far the same determination, the same unity of affirmative and negative moments. In this section, he wants to further develop “the negative determination entailed in determinate being” in general, which negation has been present therein from the start, but only as a “negation in general.” This general negation is therefore “only the first negation,” which has subsequently been “determined to the point of the *being-within-itself* of the something, to the negation of negation” (*SL* 122/125/117). Obviously, Hegel’s description of his present aim is not very clear. What he ultimately wants

to achieve here is another double negation, the first of which is the *otherness* contained within the something.

While it is possible to tease out some sense of otherness from the quality of something, Hegel here decides to take an entirely external approach in which he presupposes the presence of two different somethings. “If we call one determinate being [or one something] ‘A’ and another ‘B’, then the B is ... determined as the other [of the A]. But the A is just as much the other of the B. Both are the *other* in the same way.” Consequently, both the A and the B “are determined as *something* and as *other*.” Thus they are “the same, and [so] there is as yet no distinction available between them” (SL 122–3/125–6/117–8). Clearly, it is absurd to claim that there is no distinction between two different somethings. Perhaps Hegel means to say that, if their distinction is omitted, the two somethings are reduced to the same two determinations, namely, somethingness and otherness.

Hegel admits that “this *sameness* of the [two] determinations ... falls only within external reflection, in the *comparison* of the two” distinct somethings. Yet, he pays no price for this “external reflection.” Now that each one of the two somethings is determined as both somethingness and otherness, one of the somethings can be ignored again. We are thus left with one something, which still retains the second determination it has just acquired, namely, otherness. Indeed, by means of external reflection, we can now isolate or abstract out the latter determination and, with Plato’s authority, submit it to immanent dialectic: “the otherness, taken solely as such [and in isolation], is not the other of something but the other in its self, that is, the other of itself” (SL 123–4/126–7/118).¹¹

This reasoning is flatly fallacious;¹² otherness, if taken solely as such, cannot be its own other, for it has no distinction or relation within itself. Highly likely, Hegel reasons here that otherness necessarily implies being other than something else. Since the abstracted otherness does not have any other determination of which it could be the other, then it must be the other of itself. This puzzling form of determination by negation, that is, self-determination through the *absence* of the other/otherness, reoccurs throughout “The Doctrine of Being.”

Hegel’s next move amplifies the preceding fallacy. Since “the other by itself [i.e., otherness as such] is the other in its self [*an ihm selbst*],” it follows that it is “the other of itself, and so is the other of the other.” Therefore, concludes Hegel, otherness “is absolutely dissimilar

[*Ungleiche*] in itself; [it is thus] the self-negating, the self-*altering*." It alters or others itself into itself (SL 124/127/118).

As it turns out, the abstract other into which the initial abstract other alters itself is also an abstract other. Therefore, in self-negating or altering itself, the other "remains identical with itself, for the one into which it alters itself is [equally] the other." This is because the new other has no "additional determination" that the previous other does not have (other = other) (SL 124/127/118–9). Obviously there cannot be any *alteration* between two identical terms; and, what is self-identical cannot be "absolutely dissimilar in itself." Thus the presumed sublation of this dissimilarity (the otherness of otherness itself) is a ruse.

At any rate, Hegel now takes the said sublation for granted, though there is another catch: in this self-identity, which is achieved by "the sublation of its otherness," something "is thus posited as reflected into itself ..., as a self-identical something" (SL 124/127/118–9). The catch is that it is not simply the something's otherness that becomes identical with itself in this alteration of otherness into itself. Also, or rather, the something, of which the sublated otherness is a moment, becomes self-identical in its relatedness to its otherness. Hegel offers no further justification for this conclusion.

Hegel reasons next that "the something *preserves* itself in its *not-determinate-being* [*Nichtdasein*]." The latter is the sublated otherness of the something, which it has become and with which it is now identical. Presumably, he has now shown that the something is strictly a negatively determined determinate being; it "is essentially one [*eins*] with" its otherness. However, since its otherness is also distinct (or separate) from something as such, it is also "essentially *not one* with it." Consequently, as distinct from its otherness, something "stands ... in a *relation* to its otherness, and so is not simply otherness. The otherness is simultaneously contained in ... [the something] and *separated* [*getrennt*] from it" (SL 124–5/127/119). As I see it, this conclusion indicates that everything Hegel has said since the division of something into somethingness and otherness is frivolous and superfluous, for he has simply reproduced the presupposition that the something has two moments, namely, somethingness and otherness.

As a consequence of the foregoing dialectic, "two pairs of determinations" or relations arise, claims Hegel: "something and other" and "being-for-other and being-in-itself [*Sein-für-Anderes* und *Ansichsein*]" (SL 125/128/119). The second pair is simply presupposed, and will be

further explicated in the ensuing paragraphs. The first pair will emerge later on as two somethings.

In Hegel's use of it, this unusual expression, "*being-for-other*," is a double relation. On the one hand, it refers to the necessary determination of the something in relation to the external other in general, which has not been officially introduced yet. This also indicates that something is necessarily and essentially other-related within itself.¹³ On the other hand, the being-for-other of the something is a relation of what the something is in itself. In this sense, its being-for-otherness expresses the something's essential, internal self-relatedness. This further means that, "as a relation to itself and in *contrast* to its relation to the other, [that is,] as equality with itself in contrast to its inequality [or distinction from the other]," the inner being of the something is only "being-in-itself [*Ansichsein*]" (SL 125/128/119).

The logic here seems to be the following. The something cannot be merely for-other or other-related. In order to be so, it must be the other of the other; it must have its inner being in contrast to the other, for which it is. Thus being-in-itself is the negation of the negation: something is what it is in itself by virtue of not being its negation, namely, its being-for-other, which is the non-being of its being-in-itself. Obviously, the derivation of being-in-itself and being-for-other here is the result of Hegel's external reflection. More specifically, he derives them reciprocally from each other, which means that each category is presupposed in the derivation or negation of the other.

Hegel takes it for granted now that the something is the unity of two moments: "being-for-other and being-in-itself;" they belong to "one and the same something" and, in their unity and relation, qualify it as "determinate being." Something is thus a determinate being (once again) on account of containing both an affirmative (in-itself) and negative (for-other) moments. It is also a self-relation, since the relation of these moments constitutes the relation of the something to itself—since the something is determined precisely as their unity and relation. This outcome indicates some dialectical progress, according to Hegel: "Being, which is [now] self-relation, equality with self, is ... no longer immediate." In other words, what we have now is being-in-itself, which is "the non-being of other-being," of the something's being-for-other. Consequently, the something is now posited "as self-reflected determinate being." Thus, and once again, being-in-itself, as a moment of something, is a double negation, for it is the non-being of its non-being.

Here, being is determined as a consequence of its “negative relation” to its being-for-other. This further means that “being-in-itself is a negative relation” of its non-being (its negation) in the sense that it is “with-drawn” from the latter. Therefore, it also “has the other being outside it and opposes it” as an external determination (SL 125–6/128/119).

The uniquely Hegelian point here is that the being-in-itself of something is *not* determined as a self-identical quality that something has in its own right; such a determination as unmediated self-identity is the position of the understanding. Rather, according to Hegel, being-in-itself is the negation of its negation.¹⁴ As he confirms, the “something is *in itself* in so far as it has returned to itself from being-for-other.” However, there is another moment “in” something, which is “a determination or fact [*Umstand*] in so far as this fact is *in it* externally.” This determination is precisely something’s being-for-other. We now reach the conclusion that both being-in-itself and being-for-other are “determinations of ... one and the same ... something.” The togetherness of these two determinations within the something “leads to a further determination,” says Hegel (SL 126/129/120).

Hegel’s mission here is to implement his triadic dialectic. Something was initially simple oneness (step 1). It then split itself into being-in-itself and being-for-other (step 2). The third step establishes the “identity” of these distinct determinations. They are identical determinations precisely because “the something is one and the same something of both moments; so they are unseparated [*ungetrennt*] *in it* [emphasis added]” (SL 126/129/120). This conclusion is another difficult pill to swallow, for two distinct moments cannot be identical simply by virtue of belonging to the same something. However, Hegel also says more plausibly that they are in a unity or relation.

Hegel now claims boisterously that Kant’s elusive thing-in-itself has been rendered logically knowable. In his own wording, as a consequence of “a very simple abstraction ..., the meaning of the thing-in-itself is here revealed.” Now “the proposition that we do not know what things are in themselves” may be put to rest once and for all.¹⁵ In other words, “things are called ‘in themselves’ ... insofar as all being-for-other is abstracted” from them, that is, “insofar as they are conceived without any determination [or negation],” namely, “as nothings.” Naturally, admits Hegel, in such a conception, “one cannot indeed know what the thing-in-itself is.” To repeat, “the thing-in-itself is [assumed to be] that *absolute* [or the universal] of which we know nothing, except that

all [multiplicity of determinations] is one it.” The Hegelian logic, on the other hand, comes up with “something better than an abstraction,” namely, what “something is in its concept.” This “concept is concrete in itself,” since it is “the connection of determinations.” As such, it is “is cognizable” (SL 127–8/129–30/120–1). I do not think any of this would have been impressive news to Kant, who thought that the “in itself ..., which is the cause of appearance,” is thinkable (intelligible), “though only as a transcendental object.”¹⁶

In short, what we presumably have now is the sublated identity or unity of being-in-itself and being-for-other. In this sublation, “the *in-itself* ... has returned into itself [or is ‘reflected in itself’] from being-for-other.” As such, the in-itself of something “is the negation of its being-for-other” and, as a result of this negation, it is no longer Kant’s “abstract in-itself” (SL 129/132/122–3).

Determination, Constitution, and Limit

*Determination*¹⁷

As we have seen, “the something is reflected in itself,” since what it is in itself is precisely the reciprocally determined being-in-itself and being-for-itself. As “the negation” of the latter, the former is “mediated.” This further means that the being-in-itself of the something “is essentially affected with its negation,” namely, “being-for-other.” Hegel calls this new, more developed category “*An-sich-seiende*,” which is *Ansichsein* plus its negation, so to speak. Presently, the category of *determination* (*Bestimmung*) is identical with *An-sich-seiende*, that is, with the “essential unity” of the something’s two moments (SL 129/132/122–3).

Hegel goes on to claim that “determination contains this [meaning], that what something is [implicitly] in itself [*an sich*] is also [present] in it [*an ihm*].” At first, this statement seems like a meaningless tautology. However, Hegel’s aim here is to secretly exploit the double meaning of *Bestimmung*. On the one hand, this term refers to the further development of what the something is in itself, as we have just seen. On the other hand, it refers to the obligatory destiny of the first sense of determination (*An-sich-seiende*) to further determine itself. In a sense, this formulation reiterates Hegel’s claim that something is intrinsically other-related. However, the second sense of determination also implies the necessary self-activity of the something to further determine or “fulfill”

its intrinsic purpose and need. In Hegel's wording, this happens "insofar as its further" development "arises through its behavior toward its manifold other," which then "becomes" the something's own "filling" (*SL* 130/132/123).¹⁸ This notion will be further explained in the next subsection.

It is also further elaborated upon here through a convenient example, which is "man." In the first place, determination refers to the distinguishing characteristic (the essence) of "man." Thus "the *determination* of man" is that "determinateness" which "distinguishes" the human being "from the brute." "The *determination* of man is thinking reason." If so, "*in himself* [*an sich*] he is [this] thinking [reason]" though only "insofar as this [latter] is also distinguished from his being-for-other." His being-for-other is "his own naturalness and sensuousness, through which he directly connects with the other," namely, the objects in the external world. In this process, "his thought," which is his in-itself, is further determined in two related ways: (1) immediately in relation to his being-for-other (naturalness and sensuousness), through which (2) he relates to the external world and, in so doing, incorporates "content and filling" into his thought. However, adds Hegel, "even this determination is again only *in itself*, as an *ought* [as an obligation to fulfill its destiny]." This is to say, even "with the filling incorporated into his in-itself [i.e., into his thinking reason]," his in-itself remains "in the form of the in-itself in general" (*SL* 130/132–3/123).

In my view, Hegel's entire discussion in this section is modelled after "man," though we are led to believe that it has a general application to all forms of being or something, such as sticks and stones. This issue will arise again in what follows.

Constitution

In a way we have gotten ahead of ourselves. In other words, *constitution* is precisely the "filling" the something incorporates into itself through the aid of its being-for-other. "Constituted in this or that way," Hegel adds, "the something is entangled in external influences and relations" (*SL* 130–1/133/123–4). But this entanglement presupposes the presence of the external other, which Hegel has not formally deduced yet. In short, Hegel's conception of constitution is not presuppositionless.

Hegel clarifies that the "external connection on which the constitution [of the something] depends, and being determined by an other, [only] appear to be something accidental [*Zufälliges*]." According to

Hegel, this is not the case, for “it is the quality of something to surrender itself to this externality, and to have a *constitution*” as a result. This means that something is inherently other-related, and so it necessarily alters itself for this reason. The “alteration” of the something “falls within its constitution.” Thus its constitution represents the moment in which the something becomes an other within itself. Consequently, and metaphorically speaking, the area of the something in which this alteration occurs is only its “unstable surface,” which is the something’s otherness or other-becoming within itself. However, the alteration does not affect its determination by which Hegel must mean its being-in-itself (*SL* 131/133/124). In short, from this one-sided vantage point, the being-in-itself of the something *appears* to be unaffected by its alteration (the other vantage point will come into our purview shortly).

If what something is in itself is unaffected by the process by which it is constituted, then it follows that the intrinsic nature of the something “is indifferent [*gleichgültig*] to its constitution.” Its determination and constitution thus appear to be independent of each other. Therefore, the unity of determination and constitution, which he (very awkwardly) calls “*being-in-the-something* [*Am-Etwas-Sein*],” falls “apart into these two extremes” or moments (*SL* 131/133/124). This implies a contradiction. The contradiction, however, stems from the one-sided perspective of the understanding,¹⁹ which maintains that the being-in-itself of the something is preserved, as unaffected, by *its* altering constitution.

Hegel’s first response to the indifference or extreme-falling-apart view is another assertion: “But that which something has *in it* [*an ihm hat*] in this syllogism is the middle term connecting them.” This connective “simple middle [term] is *determinateness* as such.” Hegel’s assumption here is that this abstract term, which is the most basic element in the realm of qualitative determination, has so far determined itself, among other categories, as determination and constitution. This further means that “both determination and constitution” are, in themselves, the same determinateness as such. However, Hegel draws an exaggerated conclusion from this abstraction: in this “identity” via determinateness as such the “determination passes over into constitution on its own accord,” just as much as constitution passes over into determination. When one term passes over into the other, it is thereby “reduced” to the other; their distinction, as two extremes, has thus vanished (*SL* 131/133–4/124).

As I see it, it is illegitimate to maintain that the distinction between determination and constitution vanishes because each is, abstractly so,

determinateness as such, or that, on account of being abstractly identical, each “passes over into” the other, and so becomes indistinguishable from it. All Hegel is entitled to conclude here is that they are the same *only insofar as* they are both abstractly characterized as *determinateness* as such. True, this conclusion would suffice to refute the extreme-falling-apart claim (if it was ever made by anyone), though it would not endorse Hegel’s stronger claim that they become indistinguishable. To say this differently, in his deductions of identity, Hegel often assumes Zeno’s principle: “like things [cannot be] unlike.”²⁰ Consequently, he winds up treating the likeness of categories as their sameness.

The second proof of the identity of determination and constitution is simpler, but is also familiarly fallacious. The aim here is to define constitution as determination. First, Hegel notes that the “being-for-other, isolated as constitution and posited merely as itself, is the same as the other as such” (SL 131–2/134/124). Although it is not entirely clear what Hegel is positing merely by itself in this sentence, it is clear that he is here concerned with making constitution identical with determination. The first step he takes in this direction is that the isolation of constitution converts it into “the other as such.”

This move prepares Hegel for the fallacious reasoning we have observed previously (at SL 123–4/126–7/118). He thus repeats that “the other in its own self,” namely, the isolated, unrelated constitution, “is the other of itself.” This further means to Hegel that constitution, when taken just by itself, “is a *self-related* determinate being,” that is, the mediated self-identical being within itself. This meaningless exercise presumably demonstrates that constitution is identical with “being-in-itself with determinateness,” which is also “a *determination*” on account of determining itself in relation to *its* otherness (SL 132/134/124).

Hegel maintains now that, even when determination and constitution are “kept apart,” the latter, “which appears to be grounded in something external, in an other in general, also *depends* on determination.” Therefore, “the determining” of constitution “from outside is at the same time determined by the something’s own, immanent determination” (SL 132/134/124–5). This claim repeats his earlier claim to the effect that the incorporation of its fillings from outside is the act of the something’s own determination. Even though Hegel does not explicitly say so, this claim, if it is taken for granted, more plausibly controverts the aforementioned position of the understanding, for it shows that the

determination and constitution of the something cannot be isolated from each other.

According to Hegel, a “further” conclusion immanently follows from the previous one: “constitution belongs to that which the something is in itself [*an sich*].” Since constitution was shown to be the unstable self-alteration of the something earlier, and since it is posited as that which belongs to the intrinsic nature of the something, then it follows that “something alters itself with its constitution”—it others itself, and this is what it really is in itself. Hegel assures us that “this altering [*Änderung*] ... is no longer the first alteration of something merely in accordance with its being-for-other,” which “was only an implicitly present [*an sich seiende*] alteration ... found in the inner concept” of the something. He believes that we now have a more concrete alteration *in* and *of* the something, since “now alteration is also *posited* in the something.” Consequently, “the something itself is further determined, and the negation is posited as immanent in it, as its developed *being-within-itself* [*Insichsein*]” (SL 132/134/125). What he likely means to say is that the internal determination by self-othering now refers to the more concrete self-determining or othering through which the external other in general is posited as what something is within itself.

To recall, Hegel has arrived at this conclusion after the move in which he presumably proved the identity of determination and constitution, which were initially regarded as unrelated and distinct (by the understanding). This means that, “first of all, the transition of determination and constitution into each other is the sublation of their distinction.” With this sublation of their distinction, these moments of the something have become identical, as we have seen. Consequently, something is determined within itself as self-relation, as the relation of two moments that have lost their distinction. The result is that “determinate being or something in general is thereby posited” immanently (SL 132/134/125).

Since this posited something in general “results from the distinction which has to do with qualitative otherness within” the something, it follows that “there are *two* somethings.” This deduction of two somethings is incoherent. In other words, the presence of distinction or qualitative otherness within a something does not imply that there must be another something to which the first something is related. Rather than trying to justify his claim, Hegel simply asserts that the two somethings we now have are not simply externally or indifferently related to each

other, or derived from “*comparing*” two somethings by external reflection. Instead, “the negation [or relation] is now *immanent* in the [two] somethings,” so that each is what it is only by relating “itself to itself” via the other (SL 132/134–5/125).

The unjustified claim here is that one something necessarily determines *itself* in relation to another something, which means that the existence of one something (or its comprehension) requires the existence of another something (or its comprehension in relation to another something). In other words, it is logically impossible to have only one something, or to comprehend it adequately. Be this controversial claim as it may, Hegel’s justification of it has not been immanent at all. In other words, as I have noted previously, his conception of constitution as determination, which implies “qualitative otherness” within the something, depends on the presence of the external other in general, though he claims to have deduced the external other (or another something) immanently from the conception of the internal constitution of the something.

We now reach the conclusion that “the negation of its other [i.e., the other something] is only the quality [intrinsic nature] of the something;” “it is something” only as a consequence of “this sublating of its other” (SL 132–3/135/125). Once again, this conclusion undermines the validity of the original deduction of the something, for it implies that the quality of one something, as well as something as such, cannot be conceived without the presence of another, qualitatively different something.

At any rate, Hegel now maintains that multiple somethings are “only externally opposed” to each other by the understanding. Presumably, their internal, immanent, direct relation stems from the fact that they are speculatively identical and distinct. To say this differently, “since in fact they are *directly* connected ... in their concept,” “determinate being [as one something] has *passed over* into another being,” which is another something. But one “something is just as much an other as is the other [something].” Thus, and in the manner of A and B, each something is equally or identically both something and other (SL 132–3/135/125).

Hegel’s conclusion resembles the logic of being and nothing. The idea here is that, since each is equally the other, the conception of one immediately leads to its transition, alteration, or vanishing into the other. Therefore, each is essentially this transition, or “*the cessation [Aufhören] of being an other.*” Hegel counterintuitively calls this unstable quality of

something its “*limit* [*Grenze*]” (SL 133/135/126). Unlike what many scholars claim (see the ensuing subsection), Hegel’s “limit,” at least in the present context, is the opposite of a “border,” which implies a fixed or unique distinction between different somethings. Relatedly, we should note, too, that the cessation in question implies infinite alteration or transition, as does Hegel’s *Grenze*. Thus the infinite process we will encounter later on in the text is already deduced.

Limit

Again, something preserves itself negatively by “ceasing” to be the other in general, and this ceasing-to-be is its limit. As Marcuse clarifies, what this means generally is that “the qualitative determinates of a thing are reduced to relations that dissolve the thing into a totality of other things, so that [a thing’s determining quality] ... exists [solely] in a dimension of otherness [or non-being].”²¹ This “dimension of otherness” is itself dissolved into dimension of otherness, *ad infinitum*, and so is essentially ceasing-to-be.

Hegel maintains in *EL* that “something only is what it is *within* its limit and by *virtue* of its limit.” Thus the inner being or quality of the something is reducible to its limit, for its limit “totally permeates” it. Therefore, the limit is essentially the same as non-being or otherness (“a nothing that is,” which is also the definition of becoming). Consequently, Hegel insists that “something is *in* itself the other of itself, and the limit of something becomes objective to it in the other” (*EL* 147–8). However, this is not where the determination of something *stops*, as it were, for the other is also “*in* itself the other of itself,” *ad infinitum*.

Hegel clarifies that “here we are dealing ... with qualitative,” not *quantitative*, limit. (The latter’s limit lacks otherness, and so is an empty limit.) “For example, this piece of land is ... [qualitatively] a meadow and not a wood or a pond, and ... (not being a wood or a pond) is its limit” (*EL* 148). It is rather obvious that Hegel does not here make the limit a “determinate point beyond which something cannot go without becoming other,”²² or “the point ... at which another something stops,”²³ or “where the thing stops ..., or what the thing is not.”²⁴ As we have seen, and this cannot be overemphasized, Hegel insists that the something’s in-itself, when properly conceived, is essentially negation or otherness, and negation is its unlimited limit (becoming). Thus his example intends to illustrate that not-pond, not-wood, *ad infinitum*,

collectively constitute its limit, and it is by “virtue” of this unstable limit that meadow *is* in-itself infinite ceasing-to-be (a process).

The problematic nature of Hegel’s reasoning emerges at once when we try to cognize meadow strictly through, or *as*, this infinite negation. For instance, not-being pond or ceasing to be pond, does not necessarily imply meadow. It thus follows that the cognition of something as a meadow is irreducible to the quality of ceasing-to-be. Relatedly, since Hegel cannot bring himself to call a spade “a spade,” since he insists on reducing the specific quality of a something to its negation, he cannot explain the distinguishing nature or quality of the something. In short, he cannot deduce Krug’s pen.²⁵ Since he cannot, he has no way of affirming the conceptual boundary that excludes one something from what is beyond it or is conceptually distinct from it. Nor should we assume for a moment that he is about to establish a fixed boundary here or in what follows. If, on the other hand, we are here considering only the abstract category of something and not a specific quality, then all we are saying, and tautologically so, is that this indeterminate category is indeterminate. My point for now is simply that, as Charles Taylor rightly points out, “it is just false to say that each [something] contains its negation” in the sense that it is simply its negation.²⁶

Hegel argues next that the development of “the concept” of the limit “exhibits itself ... as entanglement and contradiction.” Hegel has noted previously that its limit is “the something’s negation reflected into itself.” This is to say, the something’s limit is the negation of the negation, the ceasing-to-be-the-other. This presumably leads to the contradictory conclusion that something both “*is*” and “*is not*” what it is in itself (*SL* 133/136/126–7). This “contradiction” depends solely on Hegel’s problematic reduction of the something’s in-itself to negation; the so-called return only repeats this reduction. In other words, it is Hegel who defines the limit as being that is not limit. At any rate, this “contradiction” manifests itself in another way: since the something’s in-itself is derived strictly from its negative relationship to another something, what seems to be *in* it as its essential determination also appears to lie *outside* it in the other in general, argues Hegel.

Because the external other is also another something, the limit of one something lies yet in another something, *ad infinitum*. Thus something’s limit ceaselessly “points beyond ... to its non-being,” to its other, and “pronounces this as its being and thus passes over into it.” This contradiction indicates that the *limit* of the something is also characterized by

both inherent restlessness and *infinite* transition. But, since the limit is something's core being, and since it has already expressed itself as infinite transition or restlessness, it also follows that "the restlessness of the something is in its limit," which is what the something essentially is. Therefore, the said contradiction is "immanent" in it, and so "sends it beyond itself." Once this contradiction is "posited" as something's immanent determination, we get a new category: "the *finite* [*das Endliche*]" (SL 135–6/137–8/128).

This transition to the *finite* from something's restlessness is also counterintuitive, for its ceaseless ceasing to be does not imply that it is a bordered or bounded finite being. In other words, this latter sense of the finite, which belongs to the understanding, is not what Hegel has in mind here. Indeed, more precisely speaking, our next category is "the *finitude* [*die Endlichkeit*]" of finite *things*, which, in Hegel's rendition of it, implies precisely their actual perishing—ceasing-to-be or transitoriness.

FINITUDE

Hegel begins this section with a brief summary of the main steps he has taken so far: "the determinate being [*Dasein*] is determined [*bestimmt*]" as limit, which is "its quality." At first, it appears that the something as a determinate being, as well as its quality, "remains ... an affirmative, stable being" in the determination of its limit. The limit thus shows itself to be the "immanent ... being-within-itself [*Insichsein*]" of the something." However, as we have seen, the limit has also shown itself as "becoming, which thus makes it the finitude [*Endlichkeit*]" of the something, says Hegel (SL 136–7/139/129).

Finitude is abruptly introduced here, especially since it is not directly implied in "becoming." Hegel thus has to step in and fix the problem: "When we say of things [*Dingen*] that *they are finite*, it [should be] understood that ... non-being constitutes their nature [*Natur*], their being." Thus, "the finite things *are*," but only insofar as they are "*negatively* self-related." Because of this negative "relationship, they send themselves beyond themselves, beyond their being." In short, they "*are*, but the truth of these beings [or things] is their *end* [*Ende*]" (SL 137/139/129).

Their finitude is now defined by Hegel as their "*end*," which refers to the fact that a finite thing "not only changes, as the something in general

[does], but it [also] *perishes*” or ceases to be. Moreover, this “perishing [*Vergehen*] is not a mere possibility.” Rather, it is a necessity, for “the being as such of finite things is to have the germ of this perishing as their being-within-itself [*Insichsein*]; the hour of their birth is the hour of their death” (*SL* 137–8/139–40/129). More succinctly put, “the living die, and they do so simply because, insofar as they live, they bear the germ of death within themselves” (*EL* 149).

As Taylor aptly points out, here “Hegel forces his argument beyond what it can strictly yield [immanently and logically], and ends up with what is really an interpretation of things powerfully suggestive of his ontology, rather than a strict [logical] demonstration of it.”²⁷ To say this differently, Hegel derives the definition of finitude solely from the observation of existential, mortal *things*. Otherwise, it would be absurd to say that the purely logical category of the finite perishes.

Hegel’s ultimate goal in this whole subsection is to derive the infinite from the finite. In order to achieve this goal, he divides it into three parts: “The Immediacy of Finitude,” “Limitation and Ought,” and “Transition of the Finite into the Infinite.” It should be noted beforehand that the preceding few paragraphs serve as a prelude only to “The Immediacy of Finitude.” As I will try to illustrate later on, this triadic division seems to be an afterthought, especially the inclusion of the ensuing subsection.

The Immediacy of Finitude

This subsection is almost entirely a critique of what Hegel takes to be the understanding’s contradictory view of finitude. As it is often the case in *SL*, the untenable view under Hegel’s scrutiny is largely invented by him. Indeed, several contradictions will be suggested in what follows, which are all engendered by either fallacious or loose reasoning.

Hegel begins his critique with a poetic expression: “The thought of the finitude of things leads to this grief because ... [finitude] is qualitative negation pushed to its extreme.” Highly likely, this comment is meant to describe the “immediacy of finitude,” which is derived from the said “extreme” negation. In other words, such a sad negation reduces *things* to “the simplicity of ... determination,” which further means that “there is no longer left to things an affirmative being *distinct* from their determination [*Bestimmung*],” which here refers to their destiny to perish (*SL* 138/140/129). This untenable and sad view of the

understanding is invented by Hegel, for no reasonable understanding reduces finite things to their destiny to perish. Indeed, it is Hegel who proposes this view, as we have just seen.

“Because this [reduction to] qualitative simplicity of the negation has brought back the abstract opposites of nothing and perishing against being, finitude is the most stubborn category of the understanding” (SL 138/140/129). The difficulty (stubbornness) of the finitude consists in returning to the earlier opposition between nothing (perishing) and being.

After several confusing sentences, Hegel reiterates the stubbornness of the finite something: “The finite, no doubt, submits itself to flux [i.e., perishing]; this is even what it is, to be determined as this end,” which is “its only end.” This inevitable ending of the finite something (i.e., its finitude) reveals its stubbornness, for it refuses to bring itself “affirmatively to its affirmative, the infinite, to let itself be connected with” the infinite. Therefore, the finite is “posited as inseparable from its nothing, and thus all reconciliation with its other, the affirmative [or the infinite], is thereby cut off.” In short, and once again, the destiny of “finite things” is reduced to nothing, which brings about their “*end*” (SL 138/140/130). The implication here is that the finite should be allowed to affirm itself by being connected to the infinite.

Here comes another contradiction, which is tied to yet another sense of sorrow: “The understanding persists in ... making non-being [i.e., nothing, perishing] the [sole] determination of [finite] things, and at the same time making ... [the finite] *imperishable* and *absolute*” (SL 138–9/140/130). The sadness of the understanding is now defined as this contradiction.

How does the reduction of the finite things to perishing (finitude) make them imperishable, and so absolute? The reason for this contradiction, claims Hegel, is that their perishing or finitude (also “transitoriness”) is regarded as “their unalterable quality.” In Hegel’s lofty mind, this means that their quality of perishing or finitude “*is eternal*” (SL 139/140/130). This is yet another sophistry on Hegel’s part: he simply takes “unalterable” to mean the opposite of perishing, and so as the equivalent of “eternal” (not-perishing). However, to say that perishing is the unalterable (*unveränderliche*) quality of a finite *thing* means precisely that it must necessarily perish at some point, and not that this quality (to perish) is the same as inalterability or imperishability itself—not that imperishability itself is the intrinsic quality of the finite, perishable things.

The foregoing contradiction, then, rests on fallacious reasoning, if not on a deliberate mischief.

As we have seen, Hegel has also attributed to the understanding the implication that, on account of being eternal, a finite something is absolute. The “consideration” that treats the finite as “absolute” is a very “important” one, says Hegel. Why this consideration is important is not explained. Indeed, Hegel finds this equation of the finite with the absolute philosophically unacceptable, for “such a standpoint” cannot be “imposed on any philosophy or opinion or the understanding” (SL 139/140–1/130). This a very strange claim, which makes us wonder why Hegel attributed the said equation to the understanding earlier.

At any rate, Hegel now admits that “the opposite [of the absolute or imperishable] is expressly present in the assertion of the finite; the finite is the restricted [*Beschränkte*], the perishable; the finite is *only* the finite, not the imperishable.” This is implied “immediately in its determination and expression.” We have now returned to the initial position, which is that finite things must perish. However, there is an important proviso: the validity of this “depends on whether” our view sticks merely to the “*being of finitude*,” and thus allows its “*transitoriness* [and *perishing*] to persist,” or whether it lets the “*transitoriness* and *perishing* perish.” The understanding regards “perishing” as “the final determination of the finite,” and so allows the finite things to merely perish. As we have seen earlier, Hegel thinks that this is the miserable end of the finite, which can be prevented by allowing it to connect with the infinite. But, according to the understanding, “the finite is incompatible with the infinite, and so cannot be united with it” for this reason (SL 139/141/130–1). The task now is to make this unification possible and, with this, make the perishing of the finite itself perish.

In the present context, this is done by highlighting, and then quickly resolving, a contradiction implied in the understanding’s thinking of the finite. The contradiction is that the finite something is presumably “posited” by the understanding as “only nothing [*nur Nichts*],” or as the “null” that “*is*” (SL 139/141/130). This “contradiction” is also manufactured by Hegel, who now claims that it should be “brought to consciousness.” Once this is done, he assures us, the logical “development of the finite shows that, because it is expressly this contradiction, it collapses within itself, and resolves” this contradiction in so doing. The anticipated or asserted resolution to this contradiction is this: the finite is “not simply perishable and [so only] perishes, but that the

perishing, the nothing, is not the final [destiny of it].” Rather, the perishing “itself perishes” (*SL* 139–40/141–2/131). Why or how this happens is not explained here.

Limitation and Ought

The chief task of this subsection is to introduce the concepts of *limitation* (*Schranke*) and *ought* (*Sollen*). I believe these categories are introduced here to convince us that the transition of the finite is a necessity or obligation. It is also clear that the present subsection follows directly from the section called “Determination, Constitution, and Limit,” at the end of which Hegel declared that the positing of the contradiction “immanent” in the something yields a new category: “the *finite*” (*SL* 136/139/129). Hegel now says that “this contradiction is abstractly present in the [mere] fact [or assertion] that the *something* is finite, or that the finite *is*” (*SL* 140/142/131).

Hegel reminds us that the “*something* or being is no longer abstractly posited, but [is rather] reflected into itself and developed as being-within-self [*Insichsein*],” which is clearly a reference to the concretion of the concept of something in general that occurred in the section called “Determination, Constitution, and Limit.” The concretely posited something, as we have seen, “has a determination and constitution in it [*an ihm*] and, more determinately so, [it has] a limit,” which is the unity of determination and constitution. As this unity, the limit “is finitude.” What Hegel likely means to say is that, when *considered* merely in isolation from its external influences, something is in (or by) itself finite. Finitude is thus “immanent in the something,” and constitutes “the quality of its being-in-itself.” (Note that *finitude* does not here refer to the perishing of things). We are now to see “what moments are included in this concept of the finite something” (*SL* 140/142/131).

Before we uncover the additional moments contained in the concept of the finite something, let us briefly account for how we ended up here. As we have seen, Hegel first (unofficially) derived the infinitude of something as that which ceaselessly ceases to be in the realm of the external other in general. This infinite process or negation was, rather counter-intuitively, declared to be its limit or in-itself. The category of the finite has just been abstracted from this infinite determination of the something simply by excluding what is deemed external but essential to it. This further means that the finite is externally abstracted from the infinite process.

Hegel's enigmatic derivation of limitation and ought has puzzled his interpreters to such an extent that they usually avoid discussing it almost entirely. As far as I can tell, this is how limitation emerges from the limit of something. To recall, the limit is essentially burdened by the other in general. Thus (1) "otherness is the *in-itself* [*Ansich*] of the something." This is basically what Hegel calls "the limit." At the same time, we have seen that, (2) this otherness falls beyond it as its "externality." It thus follows that its otherness or externality is both (1) "the something's own inwardness" and (2) "is distinguished [and separated] from it as its externality" (SL 141/142/131–2).

If we consider the something only as (1), it becomes finite in the sense that it is cut off from its otherness, its external beyond, on which what it is in itself (its limit) depends. With this act of abstractive isolation, or the exclusion of the other in general, the limit is deprived of its constitutive otherness (or constitution). The limit is now *posited* within the something merely "as a negative," indeed, as the negative of the negative, as the otherness that *is not*, or is *missing*, its fillings, namely, the external other in general. The category of *limitation* thus arises from the fact that something "in its own self" relates to its "limit as to that which is its non-being." In other words, the limit is now posited as limitation, which is precisely the limit that *explicitly* lacks its filling or external connection (SL 141/143/132). In short, limitation signifies *privation* or *deficiency* in the limit.

We must remember that, according to Hegel, the limit is not merely otherness or constitution; it is also, as distinct from this, something's intrinsic being-in-itself or determination (*Ansichsein*). Now that the constitution has been negativized with the declaration of the something as a finite being, the in-itself or determination reverts back to "determinate-ness," which is here posited as the self-relation of the being-in-itself to the negated (excluded or empty) otherness. Therefore, the negation of the limit is two-sided. On the one hand, as we have seen, it is posited as the hallowed-out limit, namely, limitation. Because of this, and on the other hand, the finite something's being-in-itself now relates to its other more negatively than was the case previously, for what it relates to *should be*, but *is not*, there. "This *being-in-itself* ..., as the negative relation to its limit, to itself as limitation, is *ought*" (SL 141/143/132).

In short, as a consequence of making it a finite, the limit of something undergoes a double-edged conceptual change: the two moments of the something's limit, namely, its determination and constitution, become ought and limitation respectively. What this means is that the determination of a finite something, what it essentially *is*, becomes its *ought*, what

it ought to be. Indeed, as we have noted previously, this ought is implied in its determination (*Bestimmung*) as its destiny.

Consequently, what ought to be “*is* and *is not* at the same time. If it [truly] *were*, it would not be ... [an ought].” Therefore, it is “essential” for the ought to have “a limitation,” to be a relation of the missing other, which remains its unrealized destiny, and so its determination (*Bestimmung*) in this latter, negative sense. In short, the ought of a finite something is “now posited as it in fact is, namely ..., [a determination that is,] at the same time, only a determinateness [*Bestimmtheit*],” which is an as yet unrealized determination or destiny of the finite something (*SL* 141–2/143–4/132–3).

Hegel’s derivation of the category of ought (and limitation) is based on the Hegelian presupposition that the finite is necessarily its other, and so cannot be without it. When it is conceived without its other, and hence strictly as a finite something, so the assumption goes, its other logically becomes what the finite is obligated to become. Therefore, “ought” implies the *necessity* of the finite’s self-transcendence. Consequently, “as the ought, the finite [necessarily] *transcends* its limitation.” However, something “has its *limitation* only as *ought*,” or it is only because it is an ought that it has its limitation. This means that ought and limitation “are inseparable”—one cannot be without the other (*SL* 142/144/133). If so, the finite something is self-contradictory, for its ought at once points beyond itself (transcendence) and internally implies the limitation (absence) of this transcendence. As a result of this contradiction, it “sublates itself, [and so both] ceases to be” and passes into an other (*SL* 146/148/136). Here, Hegel exploits the multiple meanings of “*vergeht*.” Thus, as it *passes* away, the finite passes into its other, which is the infinite. This as yet unjustified transition will be further discussed in the next subsection, after the following “Remark.”

REMARK

In a somewhat disorganized manner, Hegel makes several related arguments in this remark. One argument is that “it ought to be” means it ought to transcend itself. But that which is truly infinite does not transcend itself. “Therefore [the ought] has its place and its validity in the sphere of finitude.” Unlike what “the Kantian and Fichtean philosophy” maintains, the standpoint of the ought “is only the standpoint which persists in ... [the sphere of] finitude and thus in contradiction” (*SL* 146/147–8/135–6).²⁸

The understanding, on the other hand, asserts that “limitation *cannot* be transcended.” According to Hegel, the understanding is “unconscious” of the fact that, when “something is determined as limitation, it has already transcended ... [the limitation].” Hegel’s readymade explanation for this “fact” is this: “limit, as a determinateness, is determined as a limitation only in opposition to its other in general, that is, in opposition to *that which is without its limitation* [*Unbeschränktes*]; the other of a limitation is precisely that which is *beyond* it” (*SL* 143/145/134). Thus, according to Hegel, (1) limitation is determined or defined in relation to its opposite, namely, the illimitable, and so (2) immanently or logically turns into it. This assertion expresses the most basic formula of Hegel’s dialectic, and will be repeated many times in due course.

It is also supposed, says Hegel, that “reason, thinking, should not transcend limitation.” The new target obviously has a Kantian pedigree. According to Hegel, this supposition also implies its own immanent refutation, for “reason,” by definition, “is the *universal*, which is beyond ... all particularity,” and so is that which goes beyond “limitation.” Therefore, reason “is nothing but the overcoming of limitation!” Hegel boastfully takes it for granted that the mere reference to “the wholly abstract universal” is a “sufficient” refutation of the “equally abstract assertion that [reason’s] limitation cannot be transcended.” Similarly “even the reference to the infinite in general” is a sufficient proof “against the assertion that the finite cannot be transcended” (*SL* 145/146–7/135). In both examples, Hegel merely notes that neither the universal nor the infinite suffers from limitation. This claim does nothing to show that the finite something itself transcends its limitation.

After satisfying himself with these rather nonsensical assertions, Hegel goes on to show how finite *things* transcend their limitation. “The understanding” maintains that “the stone, the metal, does not transcend its limitation because this is not a limitation *for it*.” In other words, what such things ought to be, but are not (limitation), is only *for us*, for such objects are unaware of their ought and limitation. Hegel denies the validity of “such propositions,” which are peculiar to “the thinking of the understanding” (*SL* 143/145/134).

Hegel’s objection to this proposition is that the understanding refuses to apply “thought” to find out “what is implied in the concept” of such things. Since the understanding refuses to investigate their concept, “then it can be referred to actuality [i.e., to the real world] where such

propositions show themselves to be completely unreal.” In short, the understanding’s proposition is “as untrue” with respect to “actuality as it ... [is] to the concept” (*SL* 143–4/145/134).

According to Hegel, then, the observation of such objects as stones and metals would readily prove to the understanding that they necessarily transcend their limitation. First, Hegel admits that “the stone does not think, does not even feel, its limitation.” However, this is only true in the sense that its limitation “is not a negation in it for [the stone’s] sensation, imagination, thought, etc., which it does not possess.” Yet, claims he, “even the stone, as a something, contains the distinction of its determination or in-itself and its determinate being, and to that extent it, too, transcends its limitation.” In other words, “the concept, which is the determination or being-in-itself [*(Ansichsein)* of the stone] ..., contains the stone’s identity with its other.” Thus the stone’s concept, though the stone is unconscious of this, transcends its limitation and realizes its ought in its identity with its other. Hegel typically assumes that this is the case with the actual stone also, and that it is not merely the case in Hegel’s thought. However, here he defends this assumption in the form of a criticism: “thought” or reason is falsely supposed “to be superior to actuality, and so it should be kept apart from it in higher regions” (*SL* 144/145/134). Hegel clearly implies here that thought or spirit dwells within the stone, and other such things, as its intrinsic being-in-itself, though he has not proven at all, nor could he, that this is the case. The further implication of this assumption is that the determination of the stone, its being-in-itself, immanently implies, as has been presumably shown, its own sublation and transcendence.

In order to prove the understanding wrong, Hegel selectively turns his attention to those kinds of things that appear to do things on their own. A chemical “base is oxidizable, neutralizable, and so on.” In the process of “its oxidization, neutralization, etc., the base ... transcends ... its limitation.” This is also true of an acid. Thus, a base and an acid are each other’s limitation and ought, which are transcended when each becomes the other. This observation proves to Hegel that such things not only have an ought and limitation but also that they transcend them by passing over into each other. By exploiting the double meaning of *Sollen*, Hegel even claims that the *ought* of each thing implies its *obligation* to transcend its limitation. This claim is consistent with the elusive Hegelian chemistry, which maintains that a base and acid can be

prevented from becoming each other “only by force” (*SL* 144/145–6/134).

However, after having claimed otherwise, Hegel admits that stones, metals, bases, and acids do not engage in self-determination or self-transcendence by themselves. This is to be found in an existent that “contains the concept not merely as an abstract being-in-itself, but as a totality that exists for itself,” that is, as a self-determining totality. The concept(s), or being-in-itself, of an existent that meets this qualification is “instinct, life, sensation, representation, and so on.” Simply put, Hegel is basically saying that a living thing transcends its limitation by itself, and realizes what it ought to be immanently. For instance, “the plant,” as the concept or being-in-itself, on its own accord, “transcends the limitation of being a seed ..., flower, fruit, leaf,” and so on, and “becomes the unfolded plant,” or unfolds itself into a fully developed plant (*SL* 144/146/135). Thus the plant, which is initially the implicitly present idea in the seed is also, and as such, both the ought and limitation of the seed, and vice versa, which it transcends by becoming an actual plant—another something.

These observations about the actual things, even if they are deemed unproblematic in their own right, do not at all validate the proposition Hegel intended to validate. To recall, he intended to challenge the understanding, which holds that “the stone ... [etc.] does not transcend its limitation [and ought] because this is not a limitation [and ought] *for it*.” Clearly, Hegel’s observations have not proven at all that the limitation and the ought of the stone, plant, etc., is such *for it*; to say the least, he has not shown it to be what the understanding takes “for it” to mean.

In conclusion, as Houlgate (uncritically) puts it, for Hegel, “every finite thing harbors *within* itself its own ... *Sollen*,” as its implicit concept, independently of “human interpretation.”²⁹ This assumption also informs his belief that every finite thing *necessarily* transcends itself, and it does so immanently.³⁰ In other words, Hegel’s categories, such as “determination, mediation, self-relation, ought, and so on, anticipate categories of subjective existence. Hegel nevertheless uses them to characterize the world of [objects].”³¹ Even if we allow ourselves to swallow this difficult pill, the “*Sollen* is [still] an anticipatory revelation of the inner presence of spirit in being,”³² though spirit is here presupposed as the basis of Hegel’s theory of the finite (things).

Transition of the Finite into the Infinite

The conclusion of the previous subsection (prior to the preceding “Remark”) is that “ought,” even when it is taken just “by itself [*für sich*], entails [or implies] limitation, and limitation entails the ought” of a finite something. Both what they are and their mutual “relation” depends on being the “moments” of a finite something. In turn, they also define what it means to be finite, for the finite “entails them both in its being-within-itself [*Insichsein*].” Yet, these “moments of its determination are qualitatively opposed,” since each moment is the “negative” of the other. “The finite is thus self-contradictory in itself.” Consequently, the finite “sublates itself” by transcending itself; it ceases to be. This “result” is the finite’s “very *determination*,” says Hegel (SL 146/148/136).

As we have seen, according to Hegel’s earlier reasoning, when it ceases to be, the finite something becomes what it ought to be: “another finite.” As another finite, it has the same obligation to transcend itself. Thus the new finite also ceases to be and transitions into another finite, “and so on to *infinity*.” When “this result” is considered “more closely, the finite ..., in its ceasing-to-be [and transcending itself], [that is,] in this negation of itself, has attained its being-in-itself [*Ansichsein*]; it has *united itself with itself*.” This basically means that the being-in-itself of each finite, what it essentially *is*, is “the same thing,” namely, a relation of limitation and ought (SL 147/148/136-7). This conclusion implies that every *other* finite something is or has the same ought and limitation, which is absurd. If, on the other hand, this common ought and the limitation is taken abstractly here, then Hegel has no right to speak of an infinite series of *other* finite somethings.

Hegel’s ensuing deduction is at least as problematic. He now claims that “this *identity with itself [in the other]*, the negation of negation, is affirmative being, [which] is thus the other of the finite ...; this other is the *infinite*” (SL 147/148-9/137). Alas, what Hegel has been considering thus far is the transition of a finite something into another finite something, ad infinitum. If anything, as Hegel just told us in the previous paragraph, this reestablishes the sublated identity of the finite in another finite, ad infinitum. Thus, what is affirmed here in each transition is *another* finite something, which is here determined as the unity of limitation and ought, which determination belongs to the realm of finitude. Yet, Hegel claims that “this other is the *infinite*” itself. This transition to the infinite stems from the deceptive switch from the conception

of the “other” as the finite in general to the conception of the “other” as the other of the category of the finite. With this dubious transition, we have now obtained that “affirmative being,” the infinite, which, “in its simple concept, can ... be regarded as a new definition of the absolute” (SL 147/149/137).

INFINITY

“The main point,” Hegel now says, “is to distinguish the true concept of infinity from spurious [bad] infinity.” The former is “the infinite of reason,” and the latter is “the infinite of the understanding,” which he calls “the finitized infinite.” The true concept of the infinite will be explicated in three moves:

The infinite is:

- (a) in its *simple determination*, the affirmative as negation of the finite;
- (b) but, [as this simple determination,] it is in *alternating determination* with the *finite*, and [so] is the abstract, *one-sided* infinite;
- (c) the self-sublation of this infinite and of the finite, as *one* process ... is the *true infinite* (SL 148/149/137).

This triadic development is to be discussed in three subsections, which are titled: “The Infinite in General,” “Alternating Determination of the Finite and the Infinite,” and “Affirmative Infinity.” Notice that the alternating determination of the finite and the infinite, which is problematic in its own right, does not imply more than “*one* process.” However, Hegel’s deduction of the true infinite, as “*one* process” or becoming, will issue from bringing two processes into a single process, as he has also done with the double process he found in the abstract becoming. As we will soon see, the double process is derived from Kant’s first antinomy, and so is not by any means a logical deduction. Then again, everything Hegel is about to do in the ensuing subsections strictly depends on (Hegel’s) external reflection and engagement with the imagined understanding.

The Infinite in General

As we have seen, “the infinite is the negation of the negation, the affirmative, the being which has ... established itself out of limitedness. The infinite *is*, and, in a more intensified sense [than the forms of being we

have encountered previously], is the first immediate being; it is the true being, the elevation above limitation.” In the infinite, adds Hegel, “the spirit ... rises to its own self, to the light of its thinking, its universality, its freedom” (SL 148/150/137-8).

Although the contrary seems to be the case, Hegel reassures us here that he did not derive the infinite externally. In other words, it is not “an alien force,” including our “subjective reason,” which brings about the infinite. Rather, “it is [in] the nature of the finite ... to transcend itself,” to “become infinite.” It seems to me that Hegel here treats the finite as the finite spirit, which “rises to its own self, to the light of its thinking, its universality, its freedom,” in the infinite. Thus “the concept of the infinite ... first reveals itself” in the self-transcending of the finite spirit. If so, “the infinite does not stand beyond [or above] the finite, as something complete by itself, as if the finite were *outside* or *under* it.” Rather, it has been shown that the infinite is the “*affirmative determination* [of the finite], what it truly is in itself” (SL 148/150/138).

This statement indicates that the determination [*Bestimmung*], the being-in-itself, of the finite has gone through various stages of development, and has now revealed itself as the infinite spirit. However, it also indicates that Hegel is conflating different types of philosophical issues. To express this problem briefly for now, no one really claims that the category of the infinite implies being “beyond” or apart from the finite, though we do find claims to the effect that god, the spirit, reason, concept, and so on are beyond the finite world or finite objects. We will return to this problem shortly.

Hegel now asserts abruptly that “the finite has vanished in the infinite and what *is*, is only the *infinite*” (SL 149/150/138). As far as I can tell, this statement simply refers to the position of the understanding.³³ This abrupt assertion anticipates the theme of the next subsection.

Alternating Determination of the Finite and the Infinite

The understanding asserts that “the infinite is [infinite].” It thus conceives it merely in its “immediacy,” as “only the *infinite*.” At the same time, this immediacy is posited as “the *negation* of an other,” namely, “the finite” (SL 150/151/138). Thus we begin our present inquiry with two immediate concepts of the understanding, the infinite and the finite, which are defined as *not* each other. As we are about to see, Hegel has a very peculiar understanding of what this definitional exclusion or negation means.

As an immediate concept of the understanding, the infinite takes “the form of simple being,” as does the finite, says Hegel. However, in relation to its other or negation, this simple being is “at the same time ... the *non-being*.” Accordingly, the infinite is regarded as both “being [*seined*]” in its own right and “the *non-being* of an *other*,” namely, the finite. Thus the infinite falls “back into the category of *something* as a determination in general.” In other words, what is determined as both being and non-being is a “determinate being ... with a limit” by definition (SL 150/151/138). But the something with a limit is a finite being. In this manner, claims Hegel, the understanding unwittingly defines the infinite as a finite being. Hegel is either confused or being deceptive here, for he takes the understanding’s negative predication of the infinite, as *not-finite*, to mean the limit of the infinite, even though this negation ordinarily refers to the sheer absence of such a limit.

Accordingly, Hegel now maintains, the finite is defined “as a *real determinate being*,” which “stands opposed to the infinite.” The finite and the infinite thus stand in a qualitative relation” in which they also remain “*outside*” each other. Thus, through the aforementioned negation, “the *immediate being* of the infinite brings back the *being* of its negation, of the finite again, which at first seemed to have vanished in the infinite” (SL 150/151/138–9).

In other words, the very definition of the immediate infinite necessitates the conception of its other, the finite, as its external but related other, even though the understanding supposes that the finite vanishes in the definition just given. We now have two determinate beings or qualities: the infinite and the finite. Charitably read, Hegel thus argues that the infinite cannot be defined or grasped without appealing to its other, the finite. However, his claim that the negative definition of the infinite renders it a finite being is illegitimate. This problem will become highly relevant shortly.

First, Hegel takes into account the implications of the posited external relation of the finite and the infinite. As it turns out, “the infinite, as thus posited in opposition to the finite, in a relation in which they are [posited merely] as qualitatively distinct others, is to be called the *spurious infinite* [*Schlecht-Unendliche*].” This is “the infinite of the understanding, for which ... [this infinite] is the highest, the absolute Truth” (SL 151/152/139). At least for now, the “spurious” infinite is defined as the infinite that is kept apart from, or as indifferent toward, the finite.

“The understanding,” says Hegel, thinks that by positing them as “qualitatively distinct others ... it has attained ... the reconciliation of their truth.” However, rather than reconciling them, the understanding is “entangled in unreconciled, unresolved, absolute contradictions.” In other words, whenever the understanding is concerned with “the application and explication of these categories that belong to it,” it necessarily “falls into these contradictions on every side.” The presumed contradiction is this: when the finite is “opposed” to the infinite, each category “remains a determinate being,” since each is determined or excluded by the other. In this manner, the understanding necessarily produces the perspective that “there are *two* worlds, one infinite and one finite, and, in their relationship, the infinite is only the *limit* of the finite and is thus *itself* only a determinate, *finite infinite*” (SL 151/152/139–40). In short, and once again, the so-called contradiction is that the infinite is defined as a finite being.

This so-called contradiction depends entirely on the aforementioned confusion. Once again, “the infinite is not finite” ordinarily refers to the *absence* of any limit or boundary; it means that the infinite is neither beyond anything nor has anything beyond it. Whether or not such an infinite can be grasped by us is an entirely different issue. However, Hegel falsely takes this negative predication of the infinite to mean an exclusionary limit, which finitizes the infinite. Hegel’s problematic reasoning here can also be observed in his parallel criticism of the understanding’s understanding of the universal (the concept) and the particular. Hegel claims in *EL* that “the universal posited by the understanding is ... an abstract one, which is held onto in firm opposition to the particular. But as a result, [the universal] ... is itself determined also as a particular again” (*EL* 126). Hegel’s conclusion is “fallacious,” as Michael Inwood rightly notes. The claim that the universal and the particular are distinct does not warrant the conclusion that “universal concepts are themselves merely particular concepts, that the concept of an animal, for example, is co-ordinate with that of a giraffe.”³⁴

Moreover, in Hegel’s foregoing description of the perspective of the understanding, the limit has two meanings: (1) the conceptual determination (in-itself) of the infinite; (2) the actual, and as per impossible, existential border that envelops the infinite, making it *a* bordered, separate, finite “world.” Consequently, muses Hegel, when “the understanding, elevates itself above this finite world, rises to ... the infinite, the finite stands for it as a world on *this side*.” When “posited as only

above the finite, the infinite is *separated* from the finite” world; each, then, “is *set in a distinct* place [*Platz*].” In this perspective, Hegel discovers the “contradiction” in another way: “although the [*infinite* is the] *in-itself* [*Ansich*] of the finite,” it is nevertheless posited “as a beyond in the murky, inaccessible distance, *outside* of which ... [the finite] is situated and remains” (SL 151/153/140). The infinite is now defined as what is *beyond* the finite in two different ways: as a separate world or place and as the “murky, inaccessible” conceptual realm, outside of which remains the finite consciousness of the understanding, as well as that of Kant.

At this point, it becomes clear that Hegel is unclear about the sort of problem he wants identify and resolve. On the one hand, the presumed contradiction is stated as one in which the infinite world is paradoxically defined as a separate, bordered, finite “world” or “place.” This so-called contradiction pertains to the quantitative, spatial extension of the infinite universe. On the other hand, Hegel describes the contradiction in logical terms: it stems from positing the infinite as both the negative “*in-itself*” of the finite and what is “beyond” the finite. He then presents the latter horn of the dilemma, the “beyond,” as the Kantian (and the empiricist) skepticism about the possibility of cognizing the universal (the infinite in this sense) thing-in-itself—it is “inaccessible” to the understanding. To complicate things further, Hegel problematizes this issue as an existential/ontological question. He does this by describing the contradiction as the positing that says: “the finite is situated and remains” (exists) without its essence, which is supposed to be its ground. In short, Hegel combines all these different themes into a single consideration as if they were readily interchangeable. Consequently, different claims and philosophical problems are confused for each other. For instance, the claim that the infinite or the universal is “beyond” the understanding’s grasp simply means that it cannot be fully grasped; it does not mean that it is either finite or constitutes another actual world beyond the finite understanding.

Hegel now claims that the understanding’s contradictory finitization of the infinite leads to infinite regress or spurious infinity. Since the understanding conceives the infinite as a limited, finite being, it is forced to go beyond it. However, each step into the beyond resuscitates the limit. In short, as the understanding tries to grasp the infinite, “there arises ... a new limit” again, “and *so on to infinity*.” In this manner, what we have “present” is the endless “alternating determination of the *finite* and the *infinite*” (SL 153/155/141).

Even if we accept Hegel's false claim that the infinite becomes a finite in its conception by the understanding, it is not clear why this alternation should go on infinitely. In fact, Hegel is not here describing an endless "alternating determination of the *finite* and the *infinite*," as he thinks he is. The fact that "a new limit" arises in each step means that one always remains within the realm of the finite; therefore, there is in fact no legitimate alternation of the finite and the infinite in Hegel's scenario.

Affirmative Infinity

According to Hegel, as we have seen, the spurious infinite is a ceaseless alternating between the finite and the infinite. Hegel anticipates that "the truth" of the finite and the infinite "is already implicitly *present*" in the infinite alternation. In other words, Hegel claims that this alternation "constitutes the external realization of the concept." What is "needed is to simply compare these different moments;" this comparison is to yield their true or logical "*unity*," which would then "give the concept itself" (SL 155/156-7/143). The "concept" in question is the affirmative infinity in which the finite and the finite-infinite presumably become identical moments. We should observe here that the proposed comparison is an external consideration, as Hegel himself admits.

As it turns out, Hegel is to compare two "modes of consideration" about, or definitions of, the finite and the infinite. The first consideration starts with the understanding's definition of the infinite as *not* finite. According to Hegel, "when we say what the infinite is, namely, [that it is] ... the negation of the *finite*, the finite itself is [thereby] pronounced." Hegel's reasoning acquires another strange turn here. Certainly, "not finite" (the negation) is included in what is said, namely, the entire *saying* or definition-proposition—"the infinite is not finite." However, Hegel mischievously equates the "what" in "what is said" with the infinite itself, and thus declares that what is said *of* the infinite is included *in* the category of the infinite itself. Hence, the saying now implies "the determination of the finite *in* the infinite [emphasis added]." The same conclusion is also true of the definition of the finite as *not infinite*, claims Hegel (SL 155-6/157/143). Presumably, the conclusion we now reach is that each contains the other in itself.

Hegel now wants to show that the second mode of consideration achieves the same result as the first one. This consideration is awkwardly stated: if the infinite and the finite "are taken as *unrelated*, so that they

are connected only by ‘and’, [then] they stand as self-sufficient [entities],” confronting each other. If so taken, says Hegel, “the infinite ... is *one of the two*.” Hegel draws from this information the following conclusion: “as only one of the two,” the infinite “is not the whole but only one side [of the two]; it has its boundary in what stands on the opposite side; it is thus the finite *infinite*.” As a consequence of keeping the infinite “*apart* from the finite,” what we have here are “*two finites*,” which are in “unity” (or identical) *as* two finites or sides of the whole (SL 156/157–8/143–4).³⁵ The idea here is that the infinite proves to be a finite. This is simply an absurd conclusion, which does not in any way emerge from the expression “the infinite *and* the finite.” Apparently, he treats the expression as one whole in which the finite and the infinite stand for its two finite parts. Thus, rather than the meaning of these terms, what matters to Hegel here is that each term is only “one of the two” moments of a whole.

At the same time, continues Hegel, the same consideration shows that the finite, just “by itself, as situated apart from the infinite, is this *self-relation* in which its relativity, dependence, [and] ... transitoriness is removed.” Consequently, the finite turns out to be “the same self-subsistence and affirmation ... as the infinite” (SL 156-7/158/144). Somehow, “one of the two” now means only one, that is, the finite *without* the infinite, and this makes the finite the same as the infinite. In other words, the same reasoning is used here to obtain the opposite conclusion, which is as absurd as the first one.

As Houlgate accurately explains it, Hegel’s argument here is that, (1) “if we detach finite being from infinity altogether ..., what we are left with is simply self-relating being that is no longer explicitly finite. [2] But this means that we find in the finite ‘the same self-subsistence and affirmation which the infinite is supposed to be.’”³⁶ However, as commentators, I think it is incumbent upon us to consider whether or not this argument is legitimate, albeit briefly. As I see it, (1) is the least problematic aspect of Hegel’s argument. The conclusion it reaches is that the merely self-related finite is “is no longer explicitly finite.” However, it is logically false to say that not being “explicitly finite means” being “the same” as the infinite.

Hegel now proudly claims to have shown that “both modes of consideration ... give one and the same result,” which is the following. In one consideration, the infinite and the finite were initially assumed to be merely externally related. However, their relation has turned out to be

“essential to them,” for neither can be without its relation to the other. Thus the result of this consideration is that each “contains the other in [or as] its own determination [*Bestimmung*].” The second consideration has also yielded the same result: “when each is taken *by itself*, when it is considered in its own self,” each has “the other in itself as its own moment.” However, these moments “must ... be distinguished,” since each is also “what it is in its distinction” from the other, on account of having its own “qualitative nature [*Natur*]” (SL 157/158/144). After all, one unity is qualitatively the *infinite* with the finite as its moment or internal determination, and the other unity is qualitatively the finite with the infinite as its internal determination.

In a rather abrupt manner Hegel claims next that, “in their unity,” the finite and the infinite “thus lose their qualitative nature,” namely, their distinguishing quality (SL 157/158/144). They thus become indistinguishable or identical. According to Hegel, this is “an important reflection against the [Kantian] notion [*Vorstellung*], which ... sees in that unity [of the finite and the infinite] only contradiction, but not also the resolution of the contradiction through the negation of the qualitative determinateness of both.” Hegel’s complaint against this Kantian view is twofold. First, it considers the finite and the infinite only “as not negated,” as only distinct or separate categories. It thus fails to grasp their unity, which stems from the fact that each “essentially contains its other and is thus the other of itself in its own self.” Second, it deems the contradiction unresolvable. According to Hegel, the sublation of the contradiction emerges from the aforementioned “simple reflection,” which shows that “the same negation of negation” is “present” in both categories, and that this identical double negation establishes their unity, which unity Hegel incorrigibly keeps calling “identity” (SL 157–9/158–9/145–6).

This unity or identity, Hegel proceeds to tell us, is immanently present in the infinite alternation we have considered previously. His aim here is to posit the infinite alternation as the resolution to Kant’s first antinomy. More specifically, he wants to depict the alternation as a single process, as opposed to Kant’s two separate thought processes or reflections, on which I will have more to say shortly. Basically, we are still belaboring the issues of the endless alternation between the finite and the infinite, though this alternation is now presumably discovered in Kant’s approach to the said antinomy.

Hegel begins his critique of Kant with a modified, inventive version of the latter's dual processes of negation: "To begin with, the negation of the finite and the infinite ... can be [or is by Kant] taken as simple ... merely successive [two alternations]. Starting from the finite, the limit is transcended, the finite negated. We now have its beyond, the infinite, but in this [infinite] the limit *arises* again; and so we have the transcending of the infinite." His point is that these two acts of negation are not yet "posited as a *single unity*," for each "new act" has an independent or a "separate point of departure, so that they fall apart," or remain separate and independent acts of negating (SL 160/161/146–7). Thus the two processes of alternation are based on Hegel's reading of Kant's first antinomy, and so are entirely external considerations.

Hegel's aim, *once again*, is to show that "only a simple reflection on our part" would illustrate "what is in fact present in" these two separate processes of alternation. To anticipate, what is present in them is their "*connection*" (SL 160/162–3/146). Clearly, the "dialectic" in this context is reducible to Hegel's combined reflection against Kant's two separate reflections. This simple reflection, as Hegel is about to tell us, grasps Kant's double process as a unity in which the separate processes are connected, or made into one process.

This is not the place to provide an elaborate account of Kant's first antinomy, the success and meaning of which is still an ongoing matter of controversy; a very basic description of it should suffice. The antinomy results from two "proofs," which presumably show the validity of opposite claims about the spatiotemporal world. The thesis states that the world is finite or limited, and the antithesis states that it is infinite. Kant attempts to prove the validity of the first thesis by showing that the opposite claim ("it is infinite") is logically impossible.³⁷ Thus the thesis is affirmed through the impossibility of its antithesis. As Hegel would say, the finite is negated through the negation (cancelling) of its negation (the infinite), and so is affirmed. On the other hand, and once again, the antithesis, which is now taken as the second thesis, states that the world "is infinite with regard to both time and space." Kant attempts to prove the validity of this thesis by showing that the opposite claim ("it is finite") is logically impossible. Thus, it is presumably affirmed that the world "is infinite."³⁸ To express this in the Hegelian parlance, the infinite is negated through the negation (cancelling) of its negation (its non-being or other), and so is consequently affirmed as valid. The presumably unresolvable contradiction is that both the thesis and the antithesis are

equally valid, even though what Kant really “demonstrates” is that they are both equally untenable.

Once again, the main problem Hegel has with Kant in this context is that the latter treats the two proofs as two separate considerations or processes of thought. As opposed to this, Hegel presents them as a single process.

It is *first* the *finite*; *then* it is transcended; this negative or beyond of the finite is the infinite; *third*, this negation is again transcended, a new limit arises, [which makes it] a *finite* again. This is the complete, self-closing movement, which has ... [returned to the first, the finite]; what arises is the *same* as that *from which the beginning was made*, that is, the finite is restored ...; it has only *found itself again* ... in *its beyond*.

The same is the case with respect to the infinite. “In the infinite, [which is] the beyond of the limit [or the finite], there arises ... a new limit [or finitude], which has the same fate—is to be negated as finite. What is present again is the *same* infinite, which has just now disappeared in the new limit” (SL 160–1/161–2/146–7). Thus, regardless of our point of departure, we have the same process of self-returning endless alternation.

As Hegel first admits, all we have here is the unceasing, tedious alternation again. However, Hegel discovers something else in this unified process, which he expresses in a rather cryptic manner. The crux of his discovery is that we now have *one* process, which is the “affirmative” infinite in which neither the finite nor the finite-infinite is “a *determinate being*” “beyond” the other. Rather, “the affirmative [determination] of each contains the negation of each, and is [thus] the negation of the negation” (SL 161/162/147).

The validity of Hegel’s result depends on two related assumptions. First, Hegel now assumes that the finite and the infinite are involved in the same infinite alternation, which is their movement. Second, he assumes that “both the finite and the infinite are this *movement* [*Bewegung*], by means of which each returns to itself through its negation” (SL 161/162/147). If we grant that the procedure Hegel has just described is sound, then the first assumption follows. The second assumption, which identifies them with their movement of negation, has not been justified. In other words, Hegel mysteriously treats the movement (becoming) in which they alternate, or are negated, as what each category is *in* itself. Consequently, what is first presented as a *sequential*

repetition of the negation is now assumed to fall *within* each category. In this dubious manner, Hegel reaches the conclusion that both the finite and the finite-infinite are, in themselves, the same infinite alternation of the finite and the infinite, the same negation of the negation, the same *movement* or *becoming*.

With this externally and problematically induced conclusion under his belt, Hegel is now prepared to announce the arrival of the true infinite. Since the finite and the infinite “are equally negated together [both] in [the infinite movement] and in the result, this result, as negation of the finitude of both, is called, with truth, the infinite” (SL 162/163/148). Thus, like its “two moments,” the true infinite “is essentially only as *becoming*, but a becoming now *further determined* in its moments.” This gives us not only the definition of the true infinite but also a third definition of becoming, says Hegel. First, becoming “has abstract being and nothing as its determinations.” Second, “as alteration ...” in the sphere of determinate being, “something and other” are its determinations. “Now,” and third, “as the [true] infinite, the finite and the infinite” are its determinations, though each one of these is itself only “becoming” (SL 161/164/148).

The true infinite, as essentially this self-becoming in the becoming of its determinations, is to be regarded, “as being-withdrawn-into-itself-within-itself [*In-sich-Zurückgekehrtsein*],” or, more simply, “as relation of itself to itself” (SL 163/164/148). In other words, the true infinite is the entire becoming, within which it returns to itself (or finds itself) in and through its moments, since each one of its moments is essentially becoming. Thus both the finite and the finite-infinite are also retained in the infinite becoming, though only in the shape of doubly negated moments.³⁹

Hegel now faces the charge of rendering this infinite becoming indeterminate. He denies doing this with an assertoric statement: the true infinite “is not indeterminate, abstract being, for it is posited as negating [*negierend*] the negation; it is thus also *determinate being* [*Dasein*] for it contains negation in general... It *is* and *is there* [*ist da*] present before us” (SL 163/164/148–9). The terminology Hegel utilizes here suggests that, in his attempt to escape indeterminacy, he has reintroduced the kind of determining and being we have encountered in the sphere of *Dasein*. Clearly, this is not his intention, though his assertoric manner of dealing with the issue at hand renders his intention unclear. Based on the available information, all we can say, and negatively so, is that the

true infinite is not indeterminate precisely because it entails becoming, as “negating the negation,” and such a process or negating cannot be a finite determinate being. However, as some of Hegel’s critics have complained in the past, this explanation still fails to make the true infinite the affirmative presence Hegel claims it to be, since it is ultimately reduced to a ceaseless process or becoming.

Hegel is clearly alive to this problem. In order to avoid it, he resorts to one of his favorite techniques, which involves justifying his conclusion merely by slandering the poor understanding. First, he repeats that “only the bad infinite is the *beyond*,” for it is posited as “*only* the negation of the finite, [which itself is] posited as real.” In this sense, the infinite is merely “the abstract first negation.” Since it is thus “determined only as the negative, it does not have the affirmation of determinate being in it.” This implies that, as merely the negative, it should not be there for consciousness; “it should be unattainable [or inaccessible (*unerreichbar*)]” (SL 163/164/149). This is the position of the understanding, according to Hegel.

Presumably, Hegel has already negated this abstract negation. But he has not successfully explained why this double (or infinitely repeated) negation brings about the truly affirmative being. In order to remedy the problem at hand, he now appeals to our expectation of what such an absolute being should not be: “this unattainability is not its grandeur [*Hoheit*] but [is rather] its deficiency [*Mangel*].” Hegel’s statement is logically unsound, for the said deficiency belongs to the understanding, rather than *what* is unattainable. In other words, what is unattainable is not necessarily deficient. But, according to Hegel, what is unattainable is “untrue; and it is to be understood that such an infinite is untrue” (SL 163/164/149). Here, “untrue” refers to being unknown or unknowable—on account of being deficient. The true or known is the concrete whole, the true presence, which, *by definition*, cannot be either deficient or unknowable.

Even if we are saddened by the fact that the bad infinite is deficient and untrue, it still does not follow that Hegel’s true infinite is the determinate presence he says it is. Thus we are once again left with the choice of either accepting or rejecting Hegel’s assumption that the negating of the negation eliminates the deficiency or indeterminacy of the abstract infinite. But, and to repeat, Hegel has not been able to avoid the infinite progress implied in his repeated negation within a single process. What is needed, then, is the elimination of the endlessly emerging and vanishing

limit, which is what becoming essentially is. Having run out of “logical” options, Hegel abruptly appeals to *pictorial thinking*.⁴⁰ “The image of the progress to infinity,” he says, “is the *straight line*.” On the other hand, the “image” of the true infinite is “the *circle*” in which the line is “bent back into itself,” and so is “closed and wholly present, without a *beginning point* and *end*” (SL 163/164/149). Of course, this “proof,” if it is meant to be such, cannot be taken seriously; the notion that the concept of the infinite bends back into itself is simply beyond the pale.

Hegel now takes it for granted that “true infinity” is “posited as *affirmative* in contrast to the abstract negation,” namely, the first infinite, which is still finite, for the infinite “has obtained a concrete content here.” Whereas this contrast between the affirmative being and the finite-infinite was previously described as the contrast between the true and the untrue, it is now described as the contrast between (1) the more and the less real or, alternatively, between (2) the real and the unreal. Thus the true infinite (1) “is *reality* in a higher sense than” the finite-infinite, or (2) “the real ... is the [true] infinite,” not the finite-infinite (SL 163–4/164/149–50).

As it turns out, it is “superfluous” to use “such an earlier, more abstract category as reality” to refer to “the more concrete categories,” such as the true infinite. The main purpose of mentioning “reality” in this context, says Hegel, is to draw our attention to another distinction. The new distinction is simply brought about by definitional fiat. “The finite, as it is [determined as a moment] in the infinite,” is now said to be “determined as ideality,” or “as the ideal [*das Ideelle*].” “The ideal” is not to be confused with what is perfect, as in “ideal society.” It simply refers to the being-in-itself or essence of a finite something, which it obtains by virtue of being a moment in the true infinite—by virtue of its identity with the latter. Hegel’s point for now is that the view that treats the abstract finite as the real and the infinite as the ideal misrepresents the truth, for it overlooks the fact that what makes the finite in some sense real is not only its presence in the infinite as a whole but also the presence of the infinite in it as its ideality (SL 164/165/150).

Even though “ideality can be called the *quality* of infinity,” it is “*essentially* the process of *becoming*” or “transition.” Hegel is here simply repeating his earlier claim to the effect that the finite (and the finite-infinite) is essentially becoming, for its being-in-itself is the infinite, which is itself becoming. (Hegel will have more to say on ideality in the ensuing “Remark.”) As we have seen, according to Hegel, this same “becoming

is [also] in determinate being [*Dasein*].” It should be clear that *Dasein* now refers to the affirmative presence, namely, the true infinite. What needs to be “indicated,” or re-indicated, is the more precise sense in which the true infinite is determined. What we have before us is simply the double sublation of both “the finite as such” and “the infinity” as such, that is, of the sublation of two terms that the understanding treats as mere opposites of each other. Through a simple reflection, we discover in this double sublation that each being is essentially, and identically so, a return-into-self. Thus, in both processes, we find this same infinite “return into self [*Rückkehr in sich*]” in which being relates itself to itself, and so is “*self-relation*” or “self-related negation.” This “determinate being [*Dasein*] ... is called being-for-itself [*Fürsichsein*]” (SL 165/166/150).

In my view, and for the already familiar reasons, which need not be repeated here, the manner in which Hegel has brought us to this point is little more than a wholesale philosophical blunder. As for the more precise meaning of being-for-itself, Hans-Georg Gadamer rightly observes that it is expressive of the “concept of a self,” a concept which is “just as much essential to life, the being of organic things ..., as it is to ... consciousness.”⁴¹ According to Geoffrey R.G. Mure, there is nothing “strange in the early emergence of the Infinite,” which is defined as the self-determining, self-relating “activity of spirit.”⁴² Mure overlooks the fact that, according to the dictates of the presuppositionless immanent dialectic, both selfhood and spirit are supposed to emerge immanently. As far as I can tell, this has not been the case. In fact, as Houlgate forgivingly points out, “we will not reach that conception of being until the last part of the *Logic*.”⁴³ However, as we are about to see, Hegel’s conception of being-for-itself also presupposes *that* unjustified conception of being.

Remark

Hegel proceeds with two remarks. “Remark 1,” which is on the infinite progress, repeats the salient points of his criticism of the understanding (SL 165–71/166–71/150–4). We skip this remark and consider “Remark 2,” which opens with a blunt statement: “the finite is ideal [*ideell*]” is the fundamental “proposition” of “idealism.” In other words, as Hegel has told us previously, “the [abstract] finite is not a truly present being,” and so has little, if any, reality; indeed, it has no reality (it is untrue) apart from the ideality that grounds it (SL 171/172/154). What is simply clarified here is that this is the position of idealism, to which Hegel belongs.

As it turns out, *every* philosophy, and even “religion,” “is essentially idealism, or at least has the same [i.e., idealism] for its principle.” “A philosophy which ascribes true, ultimate, absolute being to finite determinate being [or something] as such would not deserve the name of philosophy.” With these exaggerated claims, Hegel intends to make a more qualified, less exaggerated claim: no philosophy or religion recognizes the abstract “finitude as a true being, as [something] ultimate, absolute ..., not-positing, uncreated, or eternal.” “Consequently, the contrast between idealistic and realistic [materialist] philosophy is of no importance,” since they are not opposed to each other on this fundamental proposition of philosophy, which is that the finite, just by itself, is not a true or real being (*SL* 171/172/155).

It must be clarified “in passing” that the ideal is both the “concrete, true being” (i.e., the true infinite) and “the moments of this concrete being,” but not in a co-ordinate manner. In other words, what truly *is*, “is only the one concrete whole [the true infinite], from which the moments are inseparable” (*SL* 172/172/155). I think the following analogy, drawn from another text, captures well Hegel’s meaning: *the* ideal is like “one pulse [that] throbs throughout all its members,” and at once grounds and systemizes them in so doing.⁴⁴ In *SL*, Hegel repeats similarly that “the soul [*Seele*] ..., the pure concept,” is the “more profound ground [*Grundlage*]” of the finite reality;” as such, it “is the innermost [truth] of things, their life-pulse” (*SL* 18/27/37). “Life-pulse” signifies that the ideal is both alive and life-giving; it is the spirit.

The implications of this thought, Hegel believes, are far reaching, though many of these implications are not spelled out here. One of them, which he mentions, is that he thinks his theory calls into question the “subjective idealism” of the Kantian persuasion. This form of idealism treats “the ideal ... primarily [as] the form of representational thinking [or perception (*Vorstellung gemeint*)], and whatever is in my perception ... it calls ‘ideal’ [or something that is idealized].” Such an ideal is considered “not only distinct from what is real [*Reellen*],” but is also regarded as what “should be essentially *not* real.” This is to say, according to this subjective idealism, the ideal “is not the content of the so-called *real determinate being*,” that is, of the finite reality. This further leads to the subjectivist claim that the ideal is only “in the simplicity of the ego [*Ich*] ..., it is [only] *for me*, it is the *ideal* in me.” Consequently, any “such external being is only abolished [*aufgehoben*],” for its ground is denied by the subjective philosopher (*SL* 172/173/155–6).

It is quite evident that Hegel does not take his logic to be merely “logical” in the sense that the categories of thought are “purely rational” determinations or categories “of the real,” which we utilize to account for, or make judgments about, “the determinacy of any determinate being.” Rather, he takes it to be a critique of this view, which he calls “subjective idealism.” This conclusion emerges from the fact that he thinks “the *ideal* in me,” namely, (the infinite) thought, is also the truth or reality of “external being.” It should be obvious by now that I do not think he logically proves this claim, though his failure in this regard does not mean that he does not make the said claim. At any rate, the last category we have reached is *being-for-itself*, which is to be further explicated in the next chapter.

NOTES

1. For a very interesting and elaborate recent study on this topic, see Terje Sparby, *Hegel's Conception of the Determinate Negation* (Leiden: Brill, 2014) (Sparby 2014).
2. The three page numbers included in the citation reference the following three texts: G.W.F. Hegel, *Wissenschaft der Logik. Erster Theil: Die Objektive Logik. Erste Abtheilung: Die Lehre Vom Seyn*, ed. Leopold Von Henning (Berlin: Duncker and Humblot, 1833); G.W. Hegel, *Wissenschaft der Logik I. Erster Teil: Die Objektive Logik. Erstes Buch*, ed. Eva Moldenhauer und Karl M. Michel (Frankfurt am Main: Suhrkamp Verlag, 1969); *Hegel's Science of Logic*, trans. A.V. Miller (Amherst, NY: Humanity Books, 1969) (Hegel 1969; Hegel 1833).
3. The word “*Dasein*” implies “being in a certain *place*,” However, “the representation of space does not belong here.” In short, we are not to conceive the immediate determinate being either as a specific existential thing or as pure being (SL 113/116/110).
4. Stephen Houlgate, *The Opening of Hegel's Logic: From Being to Infinity* (Lafayette, IN: Purdue University Press, 2006), 206, n. 1 (Houlgate 2006).
5. In Hegel's present use of it, “reality” does not refer to “*merely empirical* reality.” Instead, it refers to the “*in itself*,” “the Idea [*die Idee*],” the “truth,” the “essential being” of empirical reality (SL 116/119/112–3).
6. Hegel informs us here that, when the understanding grasps quality merely as “*reality*,” and so puts the “accent on the affirmative being,” it “conceals” the fact that reality-quality “contains [affirmative] determinateness and also negation.” Consequently, “negation is taken as a mere deficiency [or privation], which is [pure] nothing.” According to Hegel,

being determinate at all requires a quality to entail, not exclude, negation. Thus “a *determinate* being, a quality,” must be “determined with a non-being” or negation (*SL* 115/118/111). This necessity is expressed in Spinoza’s proposition, “*Omnis determinatio est negatio*” (*SL* 116–7/121/113; also see *EL* 147). Here, Hegel has in mind a passage from what is known to us as Spinoza’s letter 50 or L. See Benedict de Spinoza, *Improvement of the Understanding, Ethics and Correspondence*, trans. Robert H. M. Elwes (New York, NY: Cosimo, 2006), 375. As Harris points out, Hegel’s formulation of the proposition cannot be found in any of Spinoza’s works. Errol E. Harris, *An Interpretation of the Logic of Hegel* (Lanham, MD: University Press of America, 1983), 122. For other useful critiques of Hegel’s interpretation of Spinoza, see Simon Duffy, *The Logic of Expression: Quality, Quantity and Intensity in Spinoza, Hegel and Deleuze* (Hampshire, UK: Ashgate, 2006), 16 ff; Yitzhak Y. Melamed, “‘*Omnis determinatio est negatio*’: Determination, Negation, and Self-Negation in Spinoza, Kant, and Hegel,” in *Spinoza and German Idealism*, eds. Eckart Foster and Yitzhak Y. Melamed, 175–96 (Cambridge, UK: Cambridge University Press, 2012) (de Spinoza 2006; Harris 1983; Duffy 2006; Melamed 2012).

7. Giacomo Rinaldi, *A History and Interpretation of the Logic of Hegel* (Lewiston, NY: The Edwin Mellen Press, 1992), 148 (Rinaldi 1992).
8. Houlgate, *The Opening of Hegel’s Logic*, 316. Taylor, on the other hand, maintains that Hegel’s transition to something is, at best, based on “loose” claims. Charles Taylor, *Hegel* (Cambridge, UK: Cambridge University Press, 1977), 234–5. Taylor (1977)
9. Houlgate, *The Opening of Hegel’s Logic*, 319.
10. All quotations and citations from *EL* are from G.W.F. Hegel, *The Encyclopaedia Logic: Part I of the Encyclopaedia of Philosophical Sciences with the Zusätze*, trans. T.F. Geraets et al. (Indianapolis, IN: Hackett, 1991) (Hegel 1991).
11. More fully stated, Hegel says Plato opposes “*τὸ ἕτερον* [the other] ..., as one of the moments of totality, to the One, and in this way ascribes to the other a *nature* of its own. Thus the other, taken solely as such, is not the other of something but the other in its own self, that is, the other of itself” (*SL* 123–4/126–7/118). In my view, Hegel misinterprets Plato in this context, though this is not the place to settle this issue.
12. Pace John Burbidge, *On Hegel’s Logic: Fragments of a Commentary* (Atlantic Heights, NJ: Humanities Press, 1981), 48; David G. Carlson, *A Commentary to Hegel’s Science of Logic* (New York, NY: Palgrave, 2007), 72; Houlgate, *The Opening of Hegel’s Logic*, 326–7 (Burbidge 1981; Carlson 2007).
13. See Burbidge, *On Hegel’s Logic*, 49; Houlgate, *The Opening of Hegel’s Logic*, 334.

14. Houlgate similarly maintains that, according to Hegel, “something’s being-in-itself is inseparably *related* to and *tied* to ... [its] being-for-other.” In other words, “without the latter, there could not be the former: for being-in-itself is simply ‘the *non-being* of being-for-other.’” Houlgate, *The Opening of Hegel’s Logic*, 336–7. According to Winfield, on the other hand, Hegel maintains here that “what something is in itself is itself mediated by the exclusion of the other. The [negative] relation to the other is thus in it.” Richard D. Winfield, *Hegel’s Science of Logic: A Critical Rethinking in Thirty Lectures* (New York, NY: Rowman & Littlefield, 2012), 83. Winfield ignores the fact that Hegel is not currently considering the excluded other. Houlgate, on the other hand, ignores the fact that Hegel’s formulation of what something is in itself presupposes the exclusion Winfield has in mind (Winfield 2012).
15. According to Hegel, Kant abstracts the in-itself from the experience of the external object. In this Kantian abstractive “act,” “besides the empiricism of feeling and intuition ..., [a residue] is left over, which is not posited and determined by thinking self-consciousness.” What is left over is the “thing-in-itself,” which Kant treats as “something alien and external to thought.” However, objects Hegel gleefully, “it is easy to see that ... the abstract thing-in-itself is only a product of ... the abstracting thinking” itself (*SL* 53/58–9/62). To repeat, “it is just as simple to reflect that this” in-itself is “only the *product* of thinking” (*EL* 87). This criticism seems to repeat Kant’s point against him.
16. Immanuel Kant, *Critique of Pure Reason*, trans. Paul Guyer and Allen W. Wood (Cambridge, UK: Cambridge University Press, 1998), A288/B344 (Kant 1998).
17. The original text does not have this and the following two subtitles.
18. The implicit (unfair) critique of Kant in this context is that, according to Hegel, the in-itself of the something is a *determination* only insofar as it is related to an other in the complex manner we have just described. For a useful discussion of the sense(s) in which Hegel meant the present “view” as a critique of Kant, see Houlgate, *The Opening of Hegel’s Logic*, 344.
19. This is also how Burbidge seems to read Hegel’s present argument. Burbidge, *On Hegel’s Logic*, 50.
20. Plato, *Parmenides*, trans. Mary L. Gill and Paul Ryan (Indianapolis, IN: Hackett, 1996), 127e (Plato 1996).
21. Herbert Marcuse, *Reason and Revolution: Hegel and the Rise of Social Theory* (Boston, MA: Beacon Press, 1960), 132 (Marcuse 1960).
22. Pace Burbidge, *On Hegel’s Logic*, 51.
23. Pace Houlgate, *The Opening of Hegel’s Logic*, 357.
24. Pace Carlson, *A Commentary to Hegel’s Science of Logic*, 83.

25. This problem was raised against Hegel by one Wilhelm Traugott Krug, who famously challenged Hegel to deduce his pen from the immanent necessity of the Idea or the Notion. Hegel merely attacked this criticism with sarcasm, calling it “quite naïve” and unworthy of philosophical consideration. *Hegel, Philosophy of Nature, Being Part Two of the Encyclopaedia of the Philosophical Sciences*, trans. A. V. Miller (Oxford, UK: Oxford University Press, 1970), 23 (Hegel 1970).
26. Taylor, *Hegel*, 236. I find Houlgate’s and Carlson’s rebuttal of Taylor’s criticism of Hegel unconvincing. Houlgate, *The Opening of Hegel’s Logic*, 362 n. 13; Carlson, *A Commentary to Hegel’s Science of Logic*, 81–2.
27. Taylor, *Hegel*, 237.
28. I believe Hegel here misinterprets Kant. According to Kant, the ought is only the unrealized shape of the absolute, namely, the moral law or universal reason. Immanuel Kant, *Grounding for the Metaphysics of Morals*, trans. James W. Ellington (Indianapolis, IN: Hackett, 1981), 414, 388 (original pagination) (Kant 1981).
29. Houlgate, *The Opening of Hegel’s Logic*, 391.
30. Wallace offers a similar interpretation, though he speaks of this self-transcendence as a “possibility,” whereas I argue that Hegel thinks of it as inevitable. Robert Wallace, *Hegel’s Philosophy of Reality, Freedom, and God* (New York, NY: Cambridge University Press, 2005), 71–2 (Wallace 2005).
31. Marcuse, *Reason and Revolution*, 134.
32. Stanley Rosen, *The Idea of Hegel’s Science of Logic* (Chicago, IL: The University of Chicago Press, 2015), 138 (Rosen 2015).
33. Cf. John Burbidge, *On Hegel’s Logic*, 53.
34. Michael Inwood, *Hegel* (Oxon, UK: Routledge, 1983), 162 (Inwood 1983).
35. In *EL*, Hegel repeats that the expression “*infinite* ‘and’ *the finite*” expresses the kind of “dualism, which makes the opposition of finite and infinite insuperable.” In so doing, dualism unwittingly makes “the infinite ... just *one of the two*,” namely, “just one particular, *beside* the finite,” which is another particular.” Thus the infinite comes to have its “limit” or “restriction” in the finite, which is also conceived as “not what ... [the infinite] ought to be.” Consequently, according to Hegel, what the understanding produces is another finite, which it nevertheless calls “*infinite*” (*EL* 151).
36. Houlgate, *The Opening of Hegel’s Logic*, 416.
37. Kant, *Critique of Pure Reason*, A426/B454.
38. *Ibid.*, A427–9/B455–7.
39. As Houlgate puts it, “this does *not* mean, as many of Hegel’s subsequent critics have charged, that the other is ‘absorbed’ into or ‘digested’ by [the

- true infinite].” Rather, “it means simply that the finite—which is always something or other—turns itself into a *moment* of an infinite process ...” Houlgate, *The Opening of Hegel’s Logic*, 424–5.
40. Hegel generally deems such pictorial thinking unphilosophical. For instance, see G.W.F. Hegel, *Lectures on the History of Philosophy*, Vol. 2, trans. Elizabeth S. Haldane (London: Kegan Paul, 1894), 21 (Hegel 1894).
 41. Gadamer, *Hegel’s Dialectic: Five Hermeneutical Studies*, trans. P. Christopher Smith (New Haven, CT: Yale University Press, 1976), 57 (Gadamer 1976).
 42. Geoffrey R.G. Mure, *A Study of Hegel’s Logic* (Oxford, UK: Clarendon Press, 1950), 51 (Mure 1950).
 43. Houlgate, *The Opening of Hegel’s Logic*, 426.
 44. G.W.F. Hegel, *Lectures on the History of Philosophy*, Vol. I, trans. Elizabeth S. Haldane (London: Kegan Paul, 1894), 28 (Hegel 1894).

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Being-for-Itself

The three sections of this chapter are titled “Being-for-itself as such,” “One and Many,” and “Repulsion and Attraction.” The following is Hegel’s summary of this chapter:

First, being-for-itself is immediately a being-for-itself—the *one*.

Second, the one passes over into the *multiplicity of itself—repulsion*; and this otherness of the one is sublated into the ideality of the one—*attraction*.

Third, we have the alternating determination of repulsion and attraction in which they sink into equilibrium, and quality, which reaches its apex in being-for-itself, passes over into *quantity* (SL 174/174/157).¹

In the first section of this chapter, Hegel defines being-for-itself as the *one* being that is *for* itself. In the second section, he attempts to show that the one logically passes over into the many, which is the “multiplicity of itself.” In a confusing but self-serving manner, he calls both this passing-over and the state of being many “repulsion.” Since all the ones of the many are deemed identical, the many coalesce into the one (or the one one). Both this coalescing and the sublated one are called “attraction.” In the third section, we find the alternating determination of repulsion and attraction. In this perpetual process of alternating, Hegel discovers the identity of repulsion and attraction, which again gives us the infinite being-for-itself. The main idea proposed here is that the

mode of determining we find in this perpetual alternating is no longer qualitative; rather, it is quantitative. Consequently, quality passes over into quantity.

BEING-FOR-ITSELF AS SUCH

“The general concept of being-for-itself has emerged,” as we have seen. I have complained previously that this concept has not been properly justified. Hegel seems to agree: “in order to justify the use of this expression,” we simply need to demonstrate that “the representational notion [*Vorstellung*] we generally associate with it ... corresponds to its concept.” “We say that something is for itself insofar as it sublates otherness, [insofar as it] sublates its connection and community with the other, [insofar as it] has rejected ... [all forms of otherness] by abstracting from them.” Consequently, “the other is in it only as a sublated [being], as its moment; being-for-itself consists in having so transcended limitation, its otherness, so that, as this negation, it is the infinite return into itself” (*SL* 174/174–5/157). As it turns out, then, the notion “we” associate with being-for-itself is precisely the Hegelian conception of it.

Still, this meaning of being-for-itself does not tell us why it should be a “self” and why this self is “for” itself. As Errol E. Harris notes, being-for-itself implies “self-awareness and self-reflection,”² without which one cannot speak of a being that is *for* itself. However, we know that Hegel has already prematurely infused being-for-itself with selfhood—with the spirit. This is also done here, as Hegel proceeds to give us an “example” of a kind of being that is readily a “being-for-itself.” The example is “self-consciousness,” which happens to be “the nearest example of the presence of” being-for-itself (*SL* 175/175/158).

As Carlson casually observes, “self-consciousness ... is too advanced to introduce officially at this time.”³ However, it is necessary to ask, why does Hegel introduce it prematurely? In my view, Hegel does not do anything without a purpose. The introduction of self-consciousness is not only necessary for the conception of being-for-itself as a *self*, but is also required for endowing the categories of this chapter with dialectical powers.

To repeat, Hegel’s aim in this section is to deduce the category of *one* from being-for-itself. In order to obtain this result, he divides this section into three subsections: “Determinate Being and Being-for-itself,” “Being-for-one,” and “One.”

Determinate Being and Being-for-itself

This subsection consists of a single paragraph, the aim of which is to introduce the category of *being-for-one* (*Sein-für-Eines*). As Hegel has just recalled, “being-for-itself is ... the infinity which has collapsed into simple being.” In this simple being, the limited, finite, determinate being has lost its otherness; as sublated, it is now a moment of being-for-itself. Previously, this finite determinate being was said to be both an other and being-for-other. As a consequence of being “bent back into the infinite unity of being-for-itself,” it has been reduced to a moment. All this, I take it, is a repetition of what has been repeated before. What is new here is the assertion that this moment is “present in being-for-itself as *being-for-one*” (SL 175–6/176/158–9). Why this should be so is not explained at all.

Being-for-one

Hegel reminds us in this context that “being-for-itself does not have the negation [i.e., its moment] *in it* as a determinateness or limit.” Consequently, it does not have a “relation to a determinate being” that is “other” than it. Although “this moment has now been designated as being-for-one, there is still nothing present for which it would be.” In other words, the *one* for which the moment is said to be, or of which it is said to be a moment, has not as yet been determined to be so; the character of *one* “is, in fact, not yet fixed in being-for-itself” (SL 176/176/159).

The expression “being-for-one,” which is obviously presupposed, suggests that there should be a one for which the moment-being is, even though there is as yet nothing of the sort. In a rather confusing manner, Hegel now claims that the absent oneness “is in the same way a moment, itself only being-for-one, not yet one.” In other words, when we say “being-for-one,” we anticipate the presence of a one for which this being ought to be. Since this one has not been deduced yet, it manifests itself as a negative moment, as that which is necessary but missing. This moment is also *for* this missing one in the sense that it needs the latter for its determination. In this imaginative manner, Hegel has now produced two moments or “sides” of being-for-itself. These sides are marked by their “undistiguishedness,” since they are both “being-for-one” (SL 176/176/159).

According to Hegel, it further follows from this scenario that “for-one-being [*Für-eines-sein*] and being-for-itself do not constitute two ... [distinct] determinatenesses” (SL 176/177/159). This conclusion is borrowed from the preceding subsection. In other words, Hegel takes it for granted that, by virtue of being a moment or ideality in it, being-for-one is identical with the infinite being-for-itself. Consequently, being-for-itself is indistinguishable from its moments, which are also identical with each other.

With this wholly contrived information at hand, Hegel now revisits the definition of being-for-itself: it is “the sublated being of otherness, which relates itself to itself as to the sublated other.” Since this sublated otherness (moment) is now assumed to be the being that is “*for-one*,” it follows from the definition that, as the sublation of being-for-one, being-for-itself “is related only to itself.” Given the conclusion Hegel has now reached, it further follows that “the ideal [i.e., being-for-itself] is necessarily *for-one*, but it is not for an *other*; the one for which it is, is only itself” (SL 176/177/159).

What still remains a mystery here is how the category of *one* has emerged in the first place. The fact that there is no other for which being-for-itself would be does not mean that it is necessarily for *one*. Hegel, it seems to me, is aware of the fact that he has not properly deduced the category of one. But the way out of this dilemma has been already mentioned in the preliminary comments of this chapter. The *self* in being-for-itself is the spirit. This presupposition is reintroduced here more forcefully than before. “The ego, spirit in general, or God, is ideal because they are [truly] infinite.” However, as “present being-for-itself,” each term is identical with “that which is for-one.” The reason for this is that, for instance, if God were ideally different from that which is for one, then it would be both a “determinate being and a being-for-other.” In other words, if God lacked “the moment of being for-one,” it would be a finite being “because that which would be for [God] would not be [itself] but an other.” In such a scenario, God would be a finite being that depends on another being for its determination. Since this is impossible, for God is absolute, it follows that “God is ... *for himself* insofar as he himself is that which is *for him*” (SL 176–7/177/159). The validity of the present argument depends, tautologically so, on the presupposition that God is both one and an absolute self. Otherwise, the claim that God must be for-one because “he” cannot be for an other, or because there is no other, would be an invalid deduction.

It would have been more plausible to deduce the category of one from a scenario in which there are others, for the being we now have would be one among them. Taylor thinks this is what Hegel actually does: “Now this being, Hegel calls ‘the one’; and we can see the underlying logic of this, even if Hegel’s derivation seems much more fanciful. For a being of this kind [i.e., *one* being] can be picked out, that is distinguished from others, by some numeration like procedure.”⁴ This derivation of the one, adds Taylor, already anticipates the derivation of quantity.

However, what Hegel should have done and actually does are two different things. Hegel’s “fanciful” derivation of the one is clearly based on the assumption that there is no other. Thus the one is *not* “picked out” from a series of other ones. Indeed, Hegel submits himself to this “fanciful” derivation to avoid the very conception of the one Taylor here attributes to him. In other words, such a one would be a limited, finite being, whereas what Hegel needs presently is the infinite, unlimited one. As we will see, the finite one or the numerical one is not at all introduced in this chapter, which further means that quantity is not derived from the conception of such a one that could be “picked out” and so “distinguished” from other ones numerically. As a matter of fact, quantity will be derived directly from the infinite being-for-itself, which is the infinite, self-identical one.

At any rate, one way or another, Hegel now reaches the conclusion that “for-self-being [*Für-sich-sein*]” and “for-one-being [*Für-Eines-sein*]” are ... not varied significations of ideality, but [are rather two] essential, inseparable moments of” the truly infinite ideality (*SL* 177/177/160).⁵ This reasoning inherits the ongoing problem of equating what are *inseparable* with what are *indistinguishable*. That being-for-itself (God) is necessarily both “for-self” and “for-one” does not logically make the concepts of *self* and *one* identical with each other, even if this self is one self. In short, *self* and *one* are not identical terms.

John McTaggart thinks Hegel switches to *one* from *self* for the sake of convenience.⁶ Taylor, on the other hand, thinks the switch constitutes a deliberate retreat. More specifically, suspects Taylor, Hegel had sensed that the term “self” prematurely suggests the “notion of the subject ... But this is not where we want to get at this stage of the *Logic*. What we want to derive at this stage is simply *Quantity*. Hegel therefore steps into direct the traffic.”⁷ I agree that Hegel “steps into direct the traffic,” so to speak. However, it is clear to me that he does not do this in order to avoid the premature introduction of the “notion of the subject.” As I

have been insisting all along, this “notion” is necessary for the Hegelian conception of the one. As we are about to see, the one is construed precisely as the dialectical subject, which repels *itself* from within itself infinitely. Once again, this further means that the category of quantity is derived from this self-repelling dialectical subject, and not from a finite, spiritless numerical one.

One

We now arrive at the third and final stage of being-for-itself *as such*. It has been shown, Hegel believes, that “being-for-itself is the simple unity [*Einheit*] of itself and its moment,” namely, “being for-one.” Once again, he takes this simple unity to mean identity. Consequently, there is “only one determination [*Bestimmung*] available.” As I have just mentioned, this conclusion is invalid. Be that as it may, we have reached this result because “the *moments* of being-for-itself have collapsed into *indistinctness*, which is [by definition] immediacy or being.” However, this “is an *immediacy* based on the negating” of the said distinction, which negating is now “posited as its determination.” This suggests that what is now available is only the *negating*, though Hegel conveniently calls it “one determination,” albeit *one* that is devoid of distinction. In this manner, *negating* is readily treated as the *negated*. If so, he now reasons, “being-for-itself [*Fürsichsein*] is [the negated] being-for-itself [*Fürsichseiendes*]” (SL 181–2/182/164).

Hegel needs to draw two conclusions here, which seem to undermine each other. On the one hand, he needs to give being-for-itself a determinate presence, for that which lacks distinction is the limitless sheer indeterminacy, and such indeterminacy cannot be *one* determination. On the other hand, he needs to make it distinctionless. Thus the haphazard solution to this dilemma emerges in the rather self-contradictory form of *a distinctionless determination*, that is, as *one* indeterminate determination.

The category of *one* is now officially deduced from this distinctionless determination. Since being-for-itself is a determination that lacks distinction in some obscure sense, “its inner meaning vanishes,” for meaning comes from distinction or otherness as limit. But Hegel cannot say that this amounts to the absence of any limit or meaning, for this would reduce his being-for-itself to sheer indeterminacy. Consequently, he describes being-for-itself, in a self-defeating manner, as “the entirely abstract limit of itself—the *one*” (SL 181–2/182/164).

As McTaggart points out, “Hegel’s conception of One is just the same as his conception of Being for Self [*Fürsichsein*],”⁸ which is just the same as his conception of true infinity. It is telling in this regard that, in *EL*, Hegel deduces being-for-itself immediately from the true infinite (*EL* 151),⁹ and then deduces the one from the immediacy of being-for-itself. The deduction in *EL* is simply this: “As [negative] relation to itself, being-for-itself is *immediacy* ..., the *One*—that which lacks inward distinction, thereby *excluding* the *Other* from itself” (*EL* 153). Ultimately, the deduction of the one in both texts issues from the lack of inward distinction within being-for-itself. I maintain that this an unsound deduction, for the absence of distinction or otherness within it does not suffice to qualify that being as *one* being.

ONE AND MANY

This section is organized under the following subheadings: “The One in its Own Self,” “The One and the Void,” and “Many Ones: Repulsion.” As the title of this section reveals, Hegel’s aim here is to deduce the many from the one. This will be done in opposition to atomism, as Hegel understood this doctrine.

The One in its Own Self

It is rather evident from the title of this subsection (“*Das Eins an ihm selbst*”) that the one, which is what being-for-itself turned out to be, is now regarded as a *self*. To recall, “the one is the simple self-relation of being-for-itself in which its moments have collapsed into each other, and in which, consequently, being-for-self has the form of *immediacy*.” The collapse in question is sublation. Hegel thus repeats that “in its self [*selbst*], the one simply *is*; [thus] ... it is not a determinate being, [since it is] not a determination in relation to an other.” This means that it is also not “constitution.” In short, the simple one has emerged as the “negation of this circle of categories.” The purpose of this repetitive exercise is to point out that “the one is incapable of becoming an other; it is *unalterable*.” In short, all the conditions for its self-othering have now been effectively removed. Therefore, “in accordance with its concept,” the one before us is “negated self-relation” (*SL* 183/183/164–5). All the ensuing determinations of the one will be its self-determination of itself as itself; it will not transition into another.

As such, the one “has distinction in it,” says Hegel oddly. The distinction Hegel has in mind stems from two distinct characteristics or processes that are presumably present in the one: (1) it is “a direction away from itself to other;” but (2) its other-orientation is “immediately reversed” because, according to its mode of “self-determining, there is no other to which it could go.” In short, the presumed distinction is that the one determines itself both as an orientation away from itself and as an orientation toward itself. However, since the other is only imagined momentarily by Hegel, that is, since there is no other, “all dissimilarity and manifoldness have vanished” once again (SL 183/183–4/165). These seemingly pointless claims are well-calculated moves. What is gained from the exercise is precisely *nothing*. In other words, in order to deduce the category of nothing (the void) Hegel had to first imagine, and then make vanish, the aforementioned distinction.

Therefore, concludes Hegel, the result is that “there is *nothing* in” the simple one. This is a statement of self-identity, which indicates that *nothing* is the quality of the immediate one. If there is nothing (no content) in it, so his reasoning goes, then the nothing must be the in-itself of the one. However, claims Hegel, unlike the nothing of the first dialectic, “this *nothing* ... is the nothing *posited* as the void,” since it is posited (by Hegel) in and through its reflection from “no other.” “The void is thus the *quality* of the one in its immediacy” (SL 184/184/165).

The void is not only improperly deduced but is also an inapt expression, for it implies emptiness. According to McTaggart, however, the void is simply a “metaphor,” and should not be taken literally.¹⁰ But, even if we take it as a metaphor, its designation as “the *quality*” of the one is deeply problematic, for it eliminates the very moment that makes the one *one*, namely, its oneness. In other words, in order to be the utterly empty *one*, it has to have another distinct moment, which would be other than the quality of being the *void*. This is because the *one* and the *void* are not equivalent terms.

The One and the Void

As it turns out, just as much as pure being turned out to be absolutely distinct from nothing, with which it was said to be also identical, “the void as the nothing is [also] absolutely distinct from the simple immediacy,” namely, the “*affirmative* one.” Their absolute “distinction is *posited*” by the understanding. Since they are absolutely distinct, the

affirmative one and the void exclude each other entirely. Therefore, insofar as they are entirely distinct, “the nothing as the void is *outside* ... the affirmative one” (SL 184/184/165).

As the moments of being-for-itself, the one and the void are treated both as absolutely *distinct* and entirely *separate*. “The one and the void have negative relation” to each other in this sense. “Being-for-itself, in this manner of determining itself as [both] the one and the void, has again acquired a *determinate being* [*Dasein*]” (SL 184/184/165).¹¹ Presumably, this conclusion brings us to the second step of the current dialectic. In the first step, we have discovered the immediate identity of the one and the void. In the second step, the one and the void have emerged as the two absolutely distinct (or separated) moments of being-for-itself, which apparently is the position of the atomistic understanding. However, if there ever was one, the typical Hegelian dialectic is not carried out here, for the third step does not bring about the sublated unity or identity of the one and the void. Instead, the third step is an attempt in which Hegel tries to deduce the many ones from the simple one itself, which now has the void outside it. To say this differently, the many is *not* the unity of the one and the void, nor is the void another one.¹² The void is to serve a paradoxical logical function in the form of a limit or distinction that is simply nothing, and so as the limit that is not a limit at all.

Many Ones: Repulsion

On behalf of the understanding, Hegel has just concluded that being-for-itself is a determinate being. “Each one of its moments,” namely, the one and the void, “has negation [i.e., not-being-the-other] for its determination, and so is also posited as a determinate being” in its own right. However, according to Hegel, just by itself the void is only “negation in the determination of non-being,” and so is essentially “an undetermined determinate being in general.” As such, it cannot determine the one *as* one determinate being. We have assumed that it makes the one a determinate being on the further assumption that the void is itself a determinate being, just like the one. Since this is not really the case, the relation of the one to itself via the void is a purely negative relation (*we* might say it is not a relation at all), though the presence of being-for-itself as the posited one implies that it should be related to a determined determinate being that is also one. Thus we are forced to admit that “that to which the being-for-itself ..., fixed as the one,” relates “is not indeterminate

negation, as [is] the void, but is also *one*.” Therefore, “the one is ... a *becoming of many one* [*vieler Eins*]” (SL 186–7/186–7/167).

It is important to observe here that, in the German original Hegel frequently refers to what we are about to call “the many ones” both as “the many” and “the many one [*das viele Eins*]”. I believe the reason for this is that he wants to avoid the implication that his conception of the many refers to many *distinct* ones, or is in any way the other of the one. In other words, the many is ultimately identical with the one, which shows itself as the many-one. Thus we are not to understand this “becoming” as a transition of the one into *another* one.

To be more precise, Hegel’s reasoning here is that the abstract one we have deduced earlier is untenable, for it lacks limit. We have tried to find this limit in the void, which turned out to be incapable of giving the abstract one the determination it needs. With some stretch of imagination, we have concluded that the one must determine itself as a relation to itself. Thus we have (1) the one that *determines* itself and (2) the one that is *determined* by itself; or, (1) the one that *relates* to itself and (2) the one to which it is related. However, there is no real distinction between the two ones.¹³ For this reason, what we have here is only a “*becoming*” of the many-one. In other words, as we know already, Hegel’s “becoming” refers to the “vanishing” of distinction. As we will see shortly, Hegel believes that the said distinction between the ones belongs to external reflection.

Hegel clarifies that, properly speaking, the said “becoming” of the many “is not a *becoming*, for becoming is a transition of *being* into *nothing*.” What we have here instead is a scenario in which “the one ... becomes only *one*.” What he likely means to say is that the becoming we have here is not the becoming we have left behind in the first chapter of *SL*. Nevertheless, *this* becoming resembles *that* becoming in the sense that it too refers to the vanishedness of distinction, in this case, of the distinction between the repulsing and the repulsed one.

As it turns out, the reason why Hegel wants to avoid using the category of becoming here is that he wants to use another term, which expresses his intention more forcefully. Thus, after having called it “becoming,” he now maintains that, “instead of a becoming,” that is, instead of a transition “*into nothing*,” “there is present, first, the one’s own immanent [self-] relation; and, second, insofar as [this relation] is negative, and [the one is consequently] an affirmative being, the one also repels itself from *itself*. This negative relation of the one to itself is

repulsion" (SL 187/187/167–8). Thus *becoming* is replaced with *repulsion*, which ambivalently refers to the one's negative (non-) *relation* to itself and to the *process* of repelling itself from itself as itself.

Above all, Hegel has (artificially) introduced "repulsion" to impute self-determining subjectivity, or dialectical agency, to the one. Therefore, "the positing [or repulsion] of the *many one* ... is the one's own coming-out-of-itself." As crucially, Hegel wants to maintain that the many one is "only one [*nur Eins*]." Consequently, "the becoming of the many, or the production of the many, vanishes immediately." In other words, the repulsion or production in question does not produce any otherness or distinction, for "its products are [also *only*] one [*sind Eins*]." (In order to avoid awkwardly constructed sentences, I will henceforth refer to the "many one" as the "many ones.") In this, the many ones "are infinitely related to themselves," for there is no distinction or limit implied in their relation. Thus, in repelling itself, the one only reproduces itself infinitely. The many ones it produces appear to be a plurality only to external reflection, for this is not immanently implied in the ones themselves. This is because the only other posited relation or "limit" they have is the "void," which is "pure non-being [nothing]." Therefore, their relation, distinction, or limit is here "*posited* ... as none" (SL 187–8/188/168).

At this point, Hegel compares the immanent repulsion just described with the external repulsion of the understanding (of Leibniz). According to this "external reflection," repulsion is "the mutual repelling of ... [independently present] ones [monads]," which are "presupposed as already *present*." Very simply put, this external understanding of repulsion merely presupposes the existence of a plurality, that is, of the ones that remain separate, and so necessarily distinct, from each other. "It is now to be seen how ... repulsion *in itself* determines itself to the ... external repulsion" (SL 187/187/168). In other words, the second repulsion is to issue dialectically or logically from the first repulsion, though it will do so as a contradiction.

As we have seen, the first repulsion, as "the repulsion of the one from itself, is the explication of what the one is in itself." This means that many ones it repels are implicitly the in-itself (*an sich*) of the immediate, infinite one. Therefore, "the one itself [or the one *in itself*] is the many ones" in this sense (SL 188/188/169).

"Similarly," adds Hegel abruptly, "multiplicity is absolutely external to the one; for the one is the sublating of otherness" (SL 189/188–9/169). In other words, the simple one has no otherness or distinction

within itself. Instead of saying that “multiplicity vanishes in the one,” he says that it is “absolutely external to the one.” Thus we have the sheer plurality, the many ones of the second repulsion, which lack unity or relation, and remain outside the simple one. To say this differently, since their relation “is the void,” the relation of the many ones “to each other is a non-relation.” This strangely means that their relation “is external to them.” Consequently, the ones are now sheer “*others*” which have *only* “negative relation.” This, in turn, means that they exclude what makes each a one, namely their unity or oneness. We now have the following contradiction: “the one repels [i.e., posits or produces] from itself only the many which are not produced, not posited, by it” (SL 190/190/170).

REMARK

Hegel thinks the aforementioned “contradiction” belongs to Leibniz. According to Hegel, Leibniz’s idealism, which begins with the conception of the “*monad* ... , is determined only to the repulsion just considered.” Again, the repulsion just considered reduces itself “to *multiplicity* as such, in which each of the ones [monads] is only for [or by] itself, and [thus] is indifferent to ... the others.” For *Hegel’s* Leibniz, then, each monad is self-subsistent, for it is, just “by itself, the whole closed world,” and so “does not need any of the others” for its existence or determination. In short, “the Leibnizian idealism takes the *multiplicity* immediately as a *given*, and does not conceive it as a *repulsion* of the monads” by the one monad. “Therefore,” continues Hegel, this atomistic idealism “has multiplicity only ... [as] abstract externality.” In other words, “the atomistic [philosophy] does not have the concept of ideality.” If so, its atoms or monads remain indifferent to each other (SL 189/189/169).

In a very nonchalant manner, Hegel adds that this idealism actually goes “beyond the merely indifferent multiplicity; the atoms [actually do] come into a further determination ... [in relation to] each other.” However, “this is done in an inconsistent manner,” and so as a contradiction. On the one hand, the “indifferent independence of the monads,” their un-relatedness, “remains as a rigid *fundamental determination*.” On the other hand, they are said to be determined as related or connected. To clarify, the contradiction or inconsistency is that, by presupposing the “indifferent independence of the monads,” the Leibnizian idealism externalizes their connection, so that “the connection between

them falls only in the monad of monads [God], or in the contemplating philosopher" (*SL* 189/189/169–70).¹⁴ Thus what produces their connection, or this connection itself, is removed from them.

The labelling of Leibniz as an "atomist" is at best problematic.¹⁵ To say the least, it is very doubtful that he externalized the connection of the monads in the way Hegel claims he did. "By monad," says Leibniz, I understand a substance truly one, namely, one which is not an aggregate of substances ... Secondary matter, or mass (*massa*) is not a substance [of this kind], but substances," or a "plurality" (*plura entia*). As importantly, the monads are "analogous" to "souls," which are the "real unities" that ground the "multitudes" in bodies. "From this one can easily judge that there is no part of matter in which monads do not exist."¹⁶ Thus it must be concluded that there is something in bodies which is truly a single being, since extended mass, just by itself, is only *plura entia*—as St. Augustine, following Plato, rightly pointed out. In short, "the monad ... is nothing but a simple substance which enters into compounds; simple [means] ... without parts."¹⁷ This means that the compound bodies are held in unity by the soul-like monads or forms, which penetrates these bodies thoroughly. Leibniz's ideas are clearly Platonic in an important sense.¹⁸

For the same reason just stated, it is also doubtful that, according to Leibniz, "the connection between ... [the monads] falls only in the monad of monads," which is God. Indeed, with some flexibility, one can find in Leibniz the very infinite self-repulsion of the one Hegel is trying to justify here against Leibniz. As the latter maintains, "God alone is the primary Unity, or original simple substance, from which all monads, created or derived, are produced, and are born, so to speak, by continual [emanations or] fulgurations of the divinity ..., [and are] limited [or particularized] by the receptivity of the created being, which is of its essence limited."¹⁹ In other words, the diremption of the monads belongs only to the limited being, or the understanding, which seems to be also Hegel's point.

REPULSION AND ATTRACTION

This is the third and final section of the chapter titled "Being-for-itself." The category of *quantity* is introduced at the end of this section, which is further divided into "Exclusion of the One," "The one One of Attraction," and "The Relation of Repulsion and Attraction."

Exclusion of the One

To restate the contradiction: (1) “the one is, in its being-for-itself, also for-one, but this one for which it is, is its own self; its differentiation of itself is immediately sublated.” Equally, (2) each one is absolutely “distinguished ... in plurality.” Consequently, “the being-for-one as determined in exclusion [as a distinguished one] is ... a being-for-other” (SL 190/190/170).

The problem for Hegel is that the external reflection claims that “the ones ... *are*” many ones only insofar as “they are preserved through their mutual exclusion.” However, maintains he, this exclusion reduces each one to “a mere being-for-other,” and such a being cannot preserve itself (as per the principle of idealism). Consequently, their so-called “self-preservation ... through their negative [exclusionary] relation to one another” amounts to “their dissolution” (SL 191/191/170–1). In short, the purely negative, self-excluding relation in which the ones are supposed to preserve themselves is the very condition that makes their preservation impossible—hence, the restatement of the contradiction.

To say this differently, “the exclusion of the one,” hence the title of this subsection, refers to two related senses of exclusion. First, the ones are excluded or separated from each other. With *this* exclusion, *the* one, as ideality (the life-pulse), is also excluded from the whole system of the ones. Insofar as we are considering this situation in terms of being, or existentially, the double exclusion amounts to the vanishing of the whole one, of which the ones are supposed to be the ideal moments, and through which they preserve themselves as such. However, Hegel also combines this scenario with a logical consideration in which he equates separation or exclusion with *distinction*. Thus we have the implausible, logically contradictory scenario in which all the *ones* are reduced to mere *distinction*, even though they are conceived identically as *ones*.

This contradiction, of course, cannot be attributed to Leibniz, who, as Hegel recognizes, at least accepts the likeness of the monads. However, Hegel wants all sense of distinction or individuality “cancelled.” For this reason, Hegel unjustly attributes to him the claim that “monads [as atomistic ones] are the absolute principle.”²⁰ It seems to me that, if indeed Leibniz is still the target here, Hegel creates this contradiction by denying the possibility that the ones can be both like and unlike, which possibility Leibniz accepted. In other words, one often observes in Hegel Zeno’s (or Protagoras’s) principle: “unlike things cannot be like, nor like

things unlike.”²¹ Consequently, Hegel regards what is posited as both like and unlike as a contradiction, as if the expression “both like and unlike” meant “both the same and absolutely distinct.”

Hegel wants to resolve this so-called contradiction in three steps. First, all the ones are in themselves identically only “ones.” In other words, oneness (or unity) is equally the “being-in-itself [*Ansichsein*]” of every one. “Second, their determinate being and their behavior toward each other, that is, their *positing of themselves as ones*, is the mutual negating [exclusion] of themselves.” However, this negating or self-excluding, too, is “one and the same determination of all, by which they posit themselves rather as identical.” Thus they preserve themselves as identically determinate beings insofar as each one is *not* the other—insofar as, that is, each is equally a repulsion or exclusion. Third, “their ideality, which is [supposed] to be posited by others, is *their own*,” for it is *their* in-itself, their self-identity. Consequently, they “repel [themselves] just as little.” These considerations, Hegel thinks, point to the fact that all the ones are identical, and so collectively constitute “only one affirmative unity” (*SL* 191/191/171). What we have now, once again, is the speculatively sublated affirmative unity (oneness and identity) of the many ones.

As McTaggart understandably complains, Hegel’s conclusion is “positively erroneous. No doubt that which each One repels is other Ones, but this does not make them [absolutely] identical with it.”²² Indeed, the repelling and the repelled, the excluding and the excluded must be distinct ones. However, Hegel recognizes that he is simply abstracting out, or cancelling, the said distinction: “this consideration in which the ones ... show themselves to be one and the same ... is our [external] comparison.” But, claims he, it would be a mistake to think that what he has just described as the coming-together of the many ones into an affirmative unity is “only ... an external bringing of them together ..., a relating of them, by us.” On the contrary, “repulsion [or exclusion] is self-relating [or referring]: the one which excludes one[s] refers [*Beziehen*] to itself, the one, that is, to itself.” Hence the repulsion of the ones by the one “is only a *going-together-with-itself*” of the one. Consequently, the “repelling” of the ones, which is expected to produce their “diversity and externality,” expresses their “identity” instead (*SL* 191-2/191-2/171-2). Hegel oddly thinks that this external restatement of his position avoids external reflection.

This self-determining, affirmative being-for-itself, this infinite one, is all Hegel needs for his transition to quantity, for the said transition, as we will see, is deduced directly from this being, which “is only a *going-together-with-itself*.” However, for some reason, Hegel wants to repeat his argument through the relationship of two terms, namely, *repulsion* and *attraction*, which are hardly logical categories. To anticipate, Hegel’s entanglement with these terms in the ensuing subsection will introduce additional obscurities and problems to his reasoning.²³

The One One of Attraction

As Hegel defines it, “repulsion is the self-fragmentation of the one ... into many” ones (*SL* 194/194/173). Attraction, on the other hand, is “*coming-together-with-oneself*.” These definitions lead us to believe that repulsion and attraction refer to two opposite *processes*.²⁴ By showing the impossible, namely, that these opposite processes are actually identical, Hegel wants to show that the one and the many are logically identical. However, “one” and “many” do not mean “attraction” and “repulsion.” In order to avoid this problem, whenever it suits his purposes, Hegel will equate repulsion with the state of being many, and attraction with the state of being one. This adjustment is not only unjustifiable but also makes Hegel’s reasoning cryptic.

At any rate, as we have seen, the “repelling” of the ones has resulted in their “identity,” since they are all identically repelled. What is implied here, Hegel believes, is that repulsion passes over into, and thus becomes identical with its opposite, namely, *attraction* (*SL* 192/192/172). This means that (1) the “many ones” pass over “into one one” in the sense that they become identical. Thus the one one is the one that emerges from the collapse of the many ones into one undifferentiated one, so that we have only *a* sublated one, namely, the one one. However, in the same sentence, Hegel also says that (2) “repulsion passes over into attraction” (*SL* 194/194/173). Hegel thinks, or wants us to think, that (1) and (2) are interchangeable. On the assumption that they are interchangeable, his aim now is to prove (1) by proving (2).

According to Hegel, “in this way,” repulsion proves to be the “*presupposition*” of attraction. In the present context, this means that “repulsion provides the material for attraction,” and so is presupposed by attraction in this sense. This material constitutes the presupposition of attraction in the sense that the latter is either the “consumption” or bringing together

“of the ones.” Thus, “if there were no ones, there would be nothing to attract” or consume—whichever the case might be (SL 194/194/173).

In this existential consideration, Hegel has only made an observational claim to the effect that there cannot be a *process* of attraction unless some dispersed material exists beforehand. On the one hand, this implies that repulsion and attraction are not the same. On the other hand, attraction need not presuppose repulsion (as the *production* of the many ones), for the presence of the many ones is not necessarily the result of a previous process of repulsion. In order to remedy this problem, one has to presuppose a *perpetual* attraction, which necessarily presupposes an equally *perpetual* repulsion. This is exactly what Hegel does next: “the representational conception of a perpetual attraction ... presupposes an equally perpetual production [*Erzeugen*] of them.” The added condition of perpetuity secures the necessity of Hegel’s conclusion: perpetual attraction, it is true, must necessarily presuppose the perpetual production of the ones, namely, repulsion. In other words, “if attraction were [already] accomplished, that is, [if] the many were [once and for all] brought to the point of the one one, then there would only be an inert one,” without “attracting” anything (SL 194/194/173). Once again, this comment implies that: (1) attraction and repulsion are not the same; (2) the one and the many ones are not the same.

Hegel now insists that “the ideality present in attraction still has in itself also the determination of the negation of itself, the many ones to which it relates; attraction is inseparable from repulsion” (SL 194/194/173). This is yet another, but already familiar, sloppy reasoning. The fact that perpetual attracting is “inseparable” from equally perpetual repelling does not qualify repulsion as the ideality of attraction. Given that the process is assumed to be perpetual, all Hegel is entitled to conclude is that attracting and repulsing must both precede and antecede each other within the entire process, and not that attraction logically implies, or is in itself, repulsion. Indeed, attraction is not in any legitimate way conceivable as repulsion, and vice versa.

The question of precedence remains relevant in Hegel’s ensuing move. “At first,” he says, “attracting [i.e., oneness] equally belongs to each of the many ones as *immediately* present,” which means that “none [of them] has any precedence [*Vorzug*] over another.” In other words, “there can be no question here of a precedence of such a one over another,” for this would “presuppose a determined distinction between them,” which they do not have (according to Hegel). What we are

supposing now “is rather attraction,” which is “the positing of the immediately present undistinguishedness of the ones.” But it is “attraction” (the one) in *this* sense only insofar as it is “a *positing* of a one distinct from other ones.” In other words, “through” the “posited negation” of the distinct many ones (or “repulsion”), there “arises the one of attraction, which is therefore determined as the mediated [one], [as] the *one posited as one*.” Consequently, “the one one,” as the mediated and posited many ones, is the “realized ideality,” which “contains this mediation within itself as *its determination*.” Furthermore, since the many ones are the one’s realized and posited internal determination, they are “preserved,” “as many ones,” in this ideality of the one. “There is thus in it [as its filling] the unity of repulsion [i.e., the many ones] and attraction [i.e., the simple one as unity] in general” (SL 194–5/194–5/173–4).

According to Hegel, “the distinction of the one and the many has been determined as the distinction of their mutual *relation* with each other, which [relation] is divided into two, repulsion and attraction.” The distinction, then, lies in the fact that the posited one relates to the many ones as its own repulsion and the many ones relate to the one as their own attraction. However, as divided and distinct, attraction and repulsion are “independent” of each other in such a way that they are, at the same time, “essentially connected.” This connection or unity is “still indeterminate.” It will be further determined in the next subsection (SL 195/195/174).

What Hegel means to say here is that attraction and repulsion, even when they are posited as containing each other within themselves, appear to be self-subsistent, distinct determinations. However, as such, they cannot maintain themselves, for the being (or existence) of one necessarily presupposes the other. To repeat, there cannot be (perpetual) attraction without (perpetual) repulsion. However, Hegel erroneously takes this mutual condition of dependence to mean their identity. What thus needs to be shown is that attraction and repulsion are indeed identical, or are in a speculative unity, in the sense that when each posits itself as the other, it only posits itself. Consequently, they are to be grasped as the identical moments of a simple, infinite unity, namely, being-for-itself.

The Relation of Repulsion and Attraction

The main aim of this subsection is to first deduce being-for-itself from the relation of repulsion and attraction, and then deduce *quantity* from

this re-emergent category. Before arriving at these categories, Hegel repeats the issues and problems we have already covered in the previous subsections. In order to avoid too much repetition, I will skip most of the material Hegel presents in this subsection.

"It has been found," Hegel declares boastfully, that "attraction [both] presupposes" and is the "presupposition" of repulsion (*SL* 196/196/175). Repulsion and attraction are thus the "inseparable" moments of a unity or, rather, two such unities; each unity is constituted as a determinate being through the sublation of its other. Hence, the dialectic of repulsion and attraction is such that, "through the mediation of the *other*, each is *as other*; their self-subsistence consists in the fact that, in this mediation, each is posited as an other ... for-other," namely, for itself. If we equate repulsion with the many, and attraction with the one, as does Hegel, then we may attribute this double self-mediation or negation also to the many ones and the one. However, "a closer contemplation" is about to reveal that this *double* mediation, "the self-mediation of each through the *other*, is in fact itself negated." This negation will "lead them back to the unity of their concept" (*SL* 196-7/196-7/175). In short, there is in fact only one process of self-mediation in repulsion and attraction.

Hegel obtains this result in an already familiar manner, the logic of which may be fruitfully summarized as follows. We are still in the realm of being-for-itself. If we take the preceding results for granted, what we find is that attraction (or the one), through the said mediation through its other, is determined as for-itself; its relation to the other is thus its relation to itself. This mediation effectively renders the two moments identical. The same is also true of repulsion (or the many). Thus, the claim that each is the presupposition of the other now means that each is its own presupposition. Therefore, each is also "in itself only a moment," and so is a spontaneous "transition ... from itself to the other, the self-negating and positing of itself as the other of itself." But, as we have seen, its other is the same as itself—or is the same self-negation. If so, in this self-negating, each "relates itself only to its self," and so posits itself as itself. Consequently, the "being-in-itself as such" of each, and so of both, has already "passed over into being-for-itself." With this development, "being-for-itself is completed;" it "has reached its result" (*SL* 197-8/198/176-7).

Hegel's last statement is too crucial to be ignored. When he claims that "being-for-itself is completed," he certainly does not mean that this

category is now to be left behind. In fact, the whole section on quantity ultimately boils down to the explication of the being-for-itself, though this time through the negation of quantitative categories. According to Hegel, then, quantity in general is essentially being-for-itself, and it is for this reason that he readily deduces it from being-for-itself, from “this result” he has just reached.

As we have seen, the sublated one (attraction) is *perpetually* or “*infinitely self-related*” in and through its other, namely, the many ones (repulsion). As such, it is the infinite “*becoming*” (of repulsion and attraction) in which there is neither “a *beginning*” nor an end. This further means that the one, *as the whole infinite process*, does not exclude its other—the many, for its other is contained in it “as sublated,” as identical with it. Consequently, “the one is determined simultaneously as having gone beyond itself and as *unity* [with itself].” Therefore, “the one, the absolutely determined limit [*die schlechthin bestimmte Grenze*] ... is posited as the limit which ‘is not,’ which is present in being but is indifferent [*gleichgültig*] to it.” The result, then, is the “collapse” of its moments or limit “into simple immediacy.” This “being,” which is determined as “the going-together-with-itself [into its beyond] ..., is *quantity*” (SL 199/200/177).²⁵

What Hegel means by “quantity,” at least here, is clear enough, for the sentence from which it is deduced expresses precisely his meaning. Of course, “going-together-with-itself” is not necessarily quantity. Be that as it may, rather than providing an ordinary definition of quantity, Hegel’s aim here is to highlight quantitative mode of determination. In other words, “quality [or qualitative determination] is the first, immediate determinateness ... of the affirmatively present something [*des daseienden Etwas*].” Its limit lies in its other, to which it is not indifferent. Thus, one something vanishes when it *becomes* another something. “Quantity,” on the other hand, “is the determinateness which has become indifferent to ... [its] limit,” in the sense that its limit “is just as much not a limit” to it (SL 209/209/185). The quantitative mode of determining is precisely the characteristic of being-for-itself, a mode in which being goes together with itself without ever vanishing in the other.

The legitimacy of this transition to quantity depends, in part, on Hegel’s peculiar definition of quantity as a mode of determining.²⁶ I think it would be rather pointless for our present purposes to argue against him with another, “more correct,” definition of quantity. However, I hold the view that the transition is ultimately unsound, for

it is derived from the unsound conversion of qualitative relations to the category of being-for-itself, from which Hegel directly deduced quantitative determination.

Another transitional problem is that much of what Hegel has to say about quantitative determination in “Quantity” resembles the qualitative determining we have encountered in “Quality,” for his aim is to ultimately show that quantity determines itself both qualitatively and as quality. This suggests that quantitative and qualitative modes of determining are not really different, though Hegel clearly maintains otherwise.

NOTES

1. The three page numbers included in the citation reference the following three texts: G.W.F. Hegel, *Wissenschaft der Logik. Erster Theil: Die Objektive Logik. Erste Abtheilung: Die Lehre Vom Seyn*, ed. Leopold Von Henning (Berlin: Duncker and Humblot, 1833) (Hegel 1833); G.W. Hegel, *Wissenschaft der Logik I. Erster Teil: Die Objektive Logik. Erstes Buch*, ed. Eva Moldenhauer und Karl M. Michel (Frankfurt am Main: Suhrkamp Verlag, 1969) (Hegel 1969); *Hegel's Science of Logic*, trans. A. V. Miller (Amherst, NY: Humanity Books, 1969) (Hegel 1969).
2. Errol E. Harris, *An Interpretation of the Logic of Hegel* (Lanham, MD: University Press of America, 1983), 114 (Harris 1983).
3. David G. Carlson, *A Commentary to Hegel's Science of Logic*, (New York, NY: Palgrave, 2007), 106 (Carlson 2007).
4. Charles Taylor, *Hegel* (Cambridge, UK: Cambridge University Press, 1977), 245 (Taylor 1977).
5. In his ensuing “Remark,” which I skip, Hegel revisits these very issues with the already familiar examples of God, etc. (SL 177–81/177–82/160–3).
6. John McTaggart, *A Commentary on Hegel's Logic* (Cambridge, UK: Cambridge University Press, 1910), 37 (McTaggart 1910).
7. Taylor, *Hegel*, 245.
8. McTaggart, *A Commentary on Hegel's Logic*, 37.
9. All quotations and citations from *EL* are from G.W.F. Hegel, *The Encyclopaedia Logic: Part I of the Encyclopaedia of Philosophical Sciences with the Zusätze*, trans. T.F. Geraets et al. (Indianapolis, IN: Hackett, 1991) (Hegel 1991).
10. McTaggart, *A Commentary on Hegel's Logic*, 38.
11. Hegel supplements the foregoing discussion with a remark on Atomism. “The one in this form of determinate being ... first appeared with the ancients as the atomistic principle, which holds that the essence of things

- is the atom and the void.” In short, “the first thinkers” recognized in “the atomistic principle ... a speculative determination,” namely, that the void is the “*ground*” of the “becoming” of the atom which, again, stands for a “form of determinate being” (SL 184–5/184–6/165–7). The ancient Atomists, I claim, never considered the void as the essence of things. The void for them was the external space in which atoms combine differently to create different compound things.
12. According to Winfield, “the void ends up being another one.” Richard D. Winfield, *Hegel’s Science of Logic: A Critical Rethinking in Thirty Lectures* (New York, NY: Rowman & Littlefield, 2012), 120 (Winfield 2012).
 13. Stace: Hegel’s argument implies that being self-related (1) “involves a distinction between the one which ... [relates] and the one to which it is related.” Thus (2) “the one distinguishes itself from itself,” and consequently becomes many ones. Walter T. Stace, *The Philosophy of Hegel* (New York, NY: Dover, 1955), 152–153 (Stace 1955).
 14. Elsewhere, Hegel repeats that Leibniz’s philosophy “is a metaphysic which starts from a narrow determination of the understanding, namely, from absolute multiplicity ... Thereby the absolute unity is certainly set aside, but all the same it is presupposed.” For this reason, he produces an “artificial system.” G.W.F. Hegel, *Lectures on the History of Philosophy*, Vol. 3, trans. Elizabeth S. Haldane (London: Kegan Paul, 1896), 348 (Hegel 1896).
 15. For a very informative take on this issue, see Richard Arthur, “The Enigma of Leibniz’s Atomism,” in *Oxford Studies in Early Modern Philosophy*, Vol. 1, eds. Daniel Garber and Steven M. Nadler, 183–228 (Oxford, UK: Oxford University Press, 2003) (Arthur 2003).
 16. Gottfried W. Leibniz, *Philosophical Essays*, ed. and trans. Roger Ariew and Daniel Garber (Indianapolis, IN: Hackett, 1989), 165–167 (Leibniz 1989).
 17. Gottfried W. Leibniz, *Monadology*, in *Leibniz: Philosophical Writings*, ed. George H. R. Parkinson, 179–194 (London: Everyman, 1973), 179 (§ 1) (Leibniz 1973).
 18. For further discussion of this view, see Martha B. Bolton, “Leibniz to Arnauld: Platonic and Aristotelian Themes on Matter and Corporeal Substance,” in *Leibniz and His Correspondents*, ed. Paul Lodge, 97–122 (Cambridge, UK: Cambridge University Press, 2004) (Bolton 2004); Christia Mercer, “The Platonism at the Core of Leibniz’s Philosophy,” in *Platonism at the Origins of Modernity: Studies on Platonism and Early Modern Philosophy*, eds. Douglas Hedley and Sarah Hutton, 225–238 (Dordrecht, Netherlands: Springer, 2008) (Mercer 2008); Richard Arthur, “Presupposition, Aggregation, and Leibniz’s Argument for a

- Plurality of Substances,” in *Leibniz Review* 21 (2011): 91–116 (Arthur 2011).
19. Leibniz, *Monadology*, 186 (§ 47).
 20. Hegel, *Lectures on the History of Philosophy*, Vol. 3, 337.
 21. Plato, *Parmenides*, trans. Mary L. Gill and Paul Ryan (Indianapolis, IN: Hackett, 1996), (127e) (Plato 1996).
 22. McTaggart, *A Commentary on Hegel's Logic*, 40.
 23. In another “Remark,” Hegel maintains that, in the *Parmenides*, Plato inappropriately derives the “truth” of the one and the many from the proposition “*the one is many*,” and especially from “*the many is one*.” More appropriately grasped, claims Hegel, “becoming, as a process [of] repulsion and attraction,” is their only truth, which is also “the inner dialectic of the concept” (*SL* 193/193/172). He then points out that “it is easiest to grasp the dialectic of the proposition, *that the many is one*, as an external reflection.” “This [external] comparison of the many [ones] with one another immediately reveals that each one is absolutely determined only as the other; each is one, each is one of the many ... [as a consequence of] excluding the others—so that they are absolutely the same; there is present absolutely only one determination” for them all. “This is the *fact*, and all that needs to be done is to grasp this simple fact.” Hegel overlooks the fact that he has just enumerated more than one determination, for each is both one and an excluding-excluded one. Moreover, it is false to claim that their exclusion eliminates their distinction. Hegel proceeds to address this problem by blaming “the stubbornness of the understanding,” which “refuses” to grasp this simple fact “only because it *also* has distinction in mind, and indeed rightly so.” He then reassures the understanding “that the distinction will also come in again” (*SL* 193–4/193/172–3). Alas, the distinction never really comes.
 24. According to Hartnack, repulsion and attraction are merely logical concepts; it would be wrong to think of them as “if they were processes, as something taking place.” Justus Hartnack, *An Introduction to Hegel's Logic*, trans. Lars Aagaarg-Mogensen (Indianapolis, IN: Hackett, 1998), 26 (Hartnack 1998). As we will see, this is not the case. Stace similarly says that “attraction merely means that [many ones] ... are at the same time identical.” Stace, *The Philosophy of Hegel*, 154. Again, this is only one of Hegel's meanings. As we will see, both attraction and repulsion will be depicted as processes.
 25. Here, I skip Hegel's “Remark” on Kant's construction of matter from attraction and repulsion (*SL* 200–8/200–8/178–84).
 26. Dissatisfaction with Hegel's transition to quantity is not uncommon. According to Taylor, “this transition” is “a little strained” or “fanciful.” Taylor, *Hegel*, 244–245. Pinkard agrees that the transition is

“boisterously obscure,” but is redeemable nevertheless. Terry Pinkard, “Hegel’s Philosophy of Mathematics,” *Philosophy and Phenomenological Research*, Vol. 41, no. 4 (1981): 452–464 (Pinkard 1981). Both Taylor and Pinkard attempt to reconstruct Hegel’s transition in their own way.

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PART II

Magnitude (Quantity)

Quantity

The three sections of this very brief chapter have the following titles: “Pure Quantity,” “Continuous and Discrete Magnitude,” and “Delimitation of Quantity,” which refers to *a* magnitude or a quantum.

PURE QUANTITY

According to Hegel, pure quantity has emerged, as “a result,” from “the dialectic of being-for-itself.” It has done so when being-for-itself “collapsed into the form of self-same immediacy,” that is, into being-for-itself as such. In this dialectic, the one first repelled itself. “But what is repelled is ... [the one itself]; repulsion is, therefore, the self-generative flowing out” of the one itself. Thus the one as being-for-itself is immanently dialectical in the sense that it is, as the infinite subject, essentially “a perpetual coming-out-of-itself” as itself (*SL* 213/212/187–8).¹ In a nutshell, pure quantity is essentially this continuous and “perpetual coming-out-of-itself” of the one. Hegel’s aim now is to show that quantity is the unity of continuous and discrete magnitude.

TWO REMARKS

Hegel here adds two “Remarks.” In the first remark, which is on the conception of pure quantity, Hegel reproaches atomism, mathematics, and (more ambiguously) Spinoza. The atomists are criticized for emphasizing only the discreteness of quantity, and mathematicians for

ambivalently downplaying the importance of discreteness. Spinoza is approvingly quoted as saying that the concept of pure quantity, found in the intellect alone, as opposed to imagination, is “*infinita, unic et indivisibilis*”. If there is a hidden criticism of Spinoza here, it is that he does not take this infinite and indivisible absolute to be the self-negating subject. According to Hegel, “space and time,” “matter as such, light,” and “the ego,” are such subjects. “As a coming-out-of-itself,” each is “a perpetual *self-production* of ... [its] unity” or continuity. For Hegel, this is also the concept of pure quantity (SL 213–5/213–6/188–9).

Hegel’s second “Remark” is a critique of Kant’s second antinomy. Briefly stated, the thesis of this antinomy proposes the view that “all things in the world are [essentially] simple beings, that composition is only an external state of these beings.” The defense of the thesis is typically a *reductio ad absurdum* of the opposite claim.² It is rather obvious that the thesis defends Leibniz’s argument for the monad.³ “The monad ... is nothing but a simple substance which enters into compounds; simple [means] ... without parts.”⁴ The antithesis basically argues that “matter is infinitely divisible.” The counter argument to the antithesis is attributed to the “monadists,”⁵ though without mentioning that Leibniz also argued that “matter” itself is infinitely divisible—but not the monads themselves.

In other words, the antinomy pertains to the continuity and discreteness of things. According to Hegel, one problem with Kant’s approach is that he “did not conceive the antinomy in the concepts” of continuity and discreteness themselves. Rather, he considered them “in the already *concrete* form of cosmological determinations.” Antinomies, says Hegel, “must be considered in their pure conception since ... [their concepts] alone constitute the essence and the ground of the [real] antinomies.” Therefore, according to Hegel, the “true solution” of an antinomy should be sought “only in the unity of their concept.” Kant, on the other hand, and in addition, merely creates antinomies by positing “very simple categorical assertion of *each* of the two contrary moments of a determination, taking each by itself in isolation from the other” moment (SL 217/217/191–2).

We are already familiar with Hegel’s sublation of this antinomy: (1) “since each of the two opposing sides contains its other in itself, and [(2) since] neither can be conceived without the other, it follows that, if taken alone, neither one of these determinations has truth; only their unity [has truth]. This is the true dialectical contemplation of them, as

well as the true result" (*SL* 226/225/197). That (1) and (2) do not mean the same thing does not occur to Hegel, who frequently conflates the need to conceive two determinations together (or as related) (2) with each containing the other as its in-itself (1).

In short, Hegel maintains that quantity, in its concept, is the unity or identity of continuity and discreteness. These fall into contradiction when they are posited merely as separated or distinguished. The old metaphysics, which posited them as separate, failed to recognize the contradiction entailed in their separation. Kant presumably illustrated this contradiction strictly from a cosmological point of view, not logically, and so failed to resolve it. Hegel's aforementioned solution to this antinomy never goes further than the claim that they are identical because they are found together.

CONTINUOUS AND DISCRETE MAGNITUDE

The two terms discussed in this section, namely, *continuous* and *discrete*, are implied in the initial conception of quantity as the unity or identity of the one and the many. However, as Hegel notes, we are not to revert back to the previous sphere in which we have sublated the atomistic ones.⁶ Indeed, we should add, the one and the many we have encountered previously do not refer to the kind of quantitative continuity and discreteness we now have before us. If we are not to revert back, the question now becomes, how do these terms emerge from the conception of quantity as such?

Scholars often assume that some of the oddities in Hegel's vocabulary are simple oversights. For instance, Geoffrey Mure notes that the title of this subsection is "misleading." The reason for this is that magnitude is quantum, and "Quantity here is not yet Quantum."⁷ According to Hegel himself, "magnitude" usually refers to "quantum ..., not quantity" (*SL* 211/210/186). Quantum will be introduced at the end of the next section. In short, "continuous and discrete magnitudes are ... only two forms of quantity," which are "not yet quanta." We may refer to them as "magnitude" with this qualification in mind (*SL* 231/229–30/201).

This explanation begs the same question it is supposed to answer. Once again, why does Hegel call them "magnitude," even though he knows that this expression refers to more concrete forms of quantity? As John McTaggart points out, "no reason is given why we should pass from

Pure Quantity to the new stage” in which there are two magnitudes.⁸ It seems to me that “magnitude” is used here precisely because it implies the unity of both continuity and discreteness. Thus these two determinatenesses or moments of a quantity are simply presupposed with the unjustified presupposition of the term “magnitude.”

According to Hegel, “the ordinary representation of continuous and discrete magnitudes,” including that of Kant, suppresses the fact “that *each* one of these magnitudes contains both moments in itself.” Once again, the use of the term “magnitudes” in this context only obscures the point Hegel is trying to make here. In other words, when we ordinarily represent them as “continuous magnitude” and “discrete magnitude,” we already assume that each is both continuous and discrete in some sense. The challenge for Hegel is to show that continuity as such and discreteness as such logically contain each other in themselves. Since this cannot be done, he appeals to examples. For instance, “space, time, [and] matter [as such]” are “continuous magnitudes.” These are “repulsions [or flows] out of themselves.” Thus discreteness is “the absolute possibility” inherent in their continuity, and so “may be posited” in them “at any point.” This fact, of course, does nothing to controvert the “ordinary representation.” Indeed, Hegel here fails to mention that discreteness is posited in space, etc., externally. Likewise, he adds rapidly, the implicit presence of “continuity is not to be overlooked in discrete magnitude; this moment [of continuity] is, as has been shown, the one as unity” (*SL* 230/229/200). This is yet another sloppy reasoning, which, to say the least, carelessly conflates unity with continuity, under the presupposition that the discrete elements constitute *one* magnitude of some kind.

At any rate, Hegel now concludes that quantity in general “entails the two moments of continuity and discreteness.” If so, quantity is the unity of these two moments, each one of which is itself the same unity. At the same time, pure quantity, or quantity as such, is “their *immediate* unity.” Therefore, the form of quantity we are now considering (or have been presupposing all along) is a “concrete unity.” When “*posited*” as “concrete,” quantity in general is conceived as “the whole,” regardless of whether it is called a “continuous” or a “discrete” magnitude. Thus it is not to be assumed that continuous and discrete are either “outside” each other or separated within a quantity as “the whole,” that is, as a magnitude or quantum (*SL* 229–30/228/199–200).

The account Hegel has given us thus far emphasizes the identity (or togetherness) of continuous and discrete magnitudes. Thus, as Walter T.

Stace notes, Hegel does not here attempt to deduce “two different *kinds* of magnitude.”⁹ For this reason, no real distinction or limit has been found in quantity yet.

DELIMITATION OF QUANTITY

Hegel’s aim in this very brief section is to formally introduce the category of quantum. As the title (“*Begrenzung der Quantität*”) of this section already reveals, quantum is a delimited or restricted quantity. Its limit is introduced by Hegel directly through the definition of quantum. First, it “has ... the one for its principle; second, it is a multiplicity of ones; third, it is essentially continuous.” Overall, “it is the one which is sublated ... as a *unity*, as the self-continuation as such in the discreteness of the ones.” Now “discrete” does not simply refer to the presence of many distinct ones; it also refers to *one* limited whole, which is distinct (discrete) from the rest of the infinite continuity. On the basis of this externally given “principle,” namely, the one as one limited whole, Hegel concludes that discrete magnitude is now “posited as *one* magnitude.” This one is at the same time “the *excluding* one” in the sense that, since it has *a* border or “limit,” it excludes a given magnitude from the infinite, continuous quantity beyond it (SL 231/230/201).

Hegel admits here that “discrete magnitude as such should not be immediately limited; but, as distinguished from continuity it is a determinate being, one something.” He seems to silently acknowledge that this determinate being, which is *a* something or a quantum, is posited externally by our reflection. Consequently, we reach the conception of *one* magnitude, which is “the enclosing, encompassing limit.” This means that the limit is also the limit of what lies beyond it, namely, the out-flowing, continuous quantity, with which it is now in a determinate relation. We call this limited, carved-out quantity a “quantum.” However, Hegel confusingly adds that “*both*” become “quanta” (SL 231–2/230/201). This conclusion is not only unjustified but also unjustifiable, for the continuous infinite quantity beyond one quantum is not itself a quantum. This specific problem will subsequently come back to haunt Hegel, since it will amount to the problematic definition of the infinite quantity as *a* quantum at the end of the next chapter. What we need presently is the conception of one delimited quantity, namely, quantum. With this definition at hand, we move to the next chapter, “Quantum.”

NOTES

1. The three page numbers included in the citation reference the following three texts: G.W.F. Hegel, *Wissenschaft der Logik. Erster Theil: Die Objektive Logik. Erste Abtheilung: Die Lehre Vom Seyn*, ed. Leopold Von Henning (Berlin: Duncker and Humblot, 1833) (Hegel 1833); G.W. Hegel, *Wissenschaft der Logik I. Erster Teil: Die Objektive Logik. Erstes Buch*, ed. Eva Moldenhauer und Karl M. Michel (Frankfurt am Main: Suhrkamp Verlag, 1969) (Hegel 1969b); *Hegel's Science of Logic*, trans. A. V. Miller (Amherst, NY: Humanity Books, 1969) (Hegel 1969a).
2. Kant, *Critique of Pure Reason*, trans. Paul Guyer and Allen W. Wood (Cambridge, UK: Cambridge University Press, 1998), A434-6/B462-4 (Kant 1998).
3. Ibid., A442/B470.
4. Gottfried W. Leibniz, *Monadology*, in *Leibniz: Philosophical Writings*, ed. George H.R. Parkinson, 179–194 (London: Everyman, 1973), 179 (§ 1) (Gottfried 1973).
5. Kant, *Critique of Pure Reason*, A435-37/B463-5, A437-39/B467-9.
6. For a very similar observation, see John McTaggart, *A Commentary on Hegel's Logic* (Cambridge, UK: Cambridge University Press, 1910), 45 (McTaggart 1910).
7. Geoffrey R.G. Mure, *A Study of Hegel's Logic* (Oxford, UK: Clarendon Press, 1950), 59 (Mure 1950). McTaggart also notices the problem, but merely describes it as a “somewhat abrupt” transition, which could be fixed by rearranging Hegel's concepts. McTaggart, *A Commentary on Hegel's Logic*, 46–47.
8. McTaggart, *A Commentary on Hegel's Logic*, 47.
9. Walter T. Stace, *The Philosophy of Hegel: A Systematic Exposition* (New York, NY: Dover, 1955) (Stace 1955). Findlay is more critical in this regard: “the reasoning which leads to the distinguishing of these two ... [forms of magnitude] is more than usual lacking in cogency.” John N. Findlay, *Hegel: A Re-Examination* (New York, NY: Collier Books, 1958), 168 (John 1958).

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Quantum

The three sections of this chapter are called “Number,” “Extensive and Intensive Quantum,” and “Alteration of Quantum.” In its first section, Hegel uses number as the paradigmatic example of quantum in general. Then, he abruptly switches to the discussion of extensive and intensive forms of quantum, which turn out to be both distinct and identical. Subsequently, Hegel takes intensive quantum (degree) as the paradigmatic example of quantum, and argues that quantum necessarily alters itself (increases or decreases). In this alteration, he discovers the quantitative infinity in which the quantitative finite and infinite alternate tediously. This progress, Hegel claims, throws the contradiction of quantum into sharp relief. With some obscure maneuvering, Hegel brings the spurious alternation to a halt. This halt results from the redefinition of the infinite as a finite quantum, which is essentially determined as the relation of two quanta. This conception of quantum lends itself to the conception of the quantitative relation or ratio, which is the topic of the next chapter. Overall, this is an incoherent chapter for two main reasons. First, how its various sections relate to each other is not at all clear. Second, the “logic” Hegel presents in this chapter is familiarly obscure and often faulty.

NUMBER

As we have seen, to be “a one” or a finite is “the principle of quantum.” This one is: (1) “*self-relating*,” (2) “[self-] *enclosing*,” and (3) “*other-excluding* limit.” According to Hegel, when “posited” as these three determinations, quantum “is *number*” (SL 232/232/203).¹

First, Hegel distinguishes quantum “merely as such” from “quantum as number.” The distinction is that number’s “limit is posited *within itself as a manifold*,” which is not the case with the less determinate quantum as such. Because of this distinction, quantum as number is posited as a more “determinate being,” which explicitly encloses “many ones” within itself; it is thus explicitly a whole that contains plurality of ones within itself. If it “encloses” a certain number of ones within itself, then it necessarily “excludes” the other ones. What it encloses within itself is “a specific aggregate” of connected ones. Hegel calls this aggregate “the *amount*,” and the enclosing limit the “unit.” Thus a number is essentially a specific, self-enclosed unit, which contains a specific amount of ones; “*amount* and *unit* comprise the *moments* of number” (SL 233-4/232/203). This definition of number belongs to the understanding, which takes these two characteristics of number for granted.

On the one hand, maintains Hegel, “it is correct to say that amount *consists* of many [discrete ones], for the [many] ones are not sublated in it.” However, since these ones are all identical, they do not immanently reveal their enclosing and other-excluding limit. Thus, regardless of “whether they are outside or inside” the number, the infinitely many ones are not in any way “distinct from the limit,” say, “the hundredth one,” which is identical with any other one. The idea here is that both the included and the excluded ones cannot tell us why there should be a specific amount, why this amount “is not indifferent to” its limit. In short, even though it is supposed that a number’s amount makes it “a determined quantum,” its determining limit is indeterminate (SL 234/232-3/203-4).

Consequently, we must draw the conclusion that “this distinguishing” or limiting fails to “become a qualitative determinateness.” Rather, “it remains only quantitative” in the sense that it does not have a distinct, determining limit. We are now forced to admit that the limit of the amount of a number “falls only within the comparing *external* reflection,” for the amount itself is indifferent to its limit. This can only mean that (1) the amount of a number does not have an intrinsic limit, and

(2) this limit is supplied externally by us. However, in a rather obscure manner, Hegel now identifies this externality with the quantity that falls outside the amount. Thus, and in this manner, we reach the conclusion that “*indifference (Gleichgültigkeit)*” to its limit is the “essential determination” of a number (quantum), in the sense that its limit “is completely external” to it, for its limit or determination lies beyond it (SL 235/233/204).

This obscure move now allows Hegel to create a “contradiction.” On the one hand, a number, “as one [unit] ..., has the *determinateness* ..., as its own moment, within itself.” Yet, what qualifies it as one unit or a whole is external to it. The contradiction thus is that “this absolute externality is within the one itself.” According to Hegel, “this contradiction of number or quantum in general is the quality of quantum.” To put this differently, a quantum is necessarily determined as this contradiction. “Further determinations” will issue from this contradiction (SL 235/233-4/204).

It seems to me that this contradiction is ill-defined and improperly justified. In other words, from the claim that the amount of a number does not immanently reveal its limit, or is indifferent to it, Hegel leaps to the conclusion that this amount is absolutely external to it. This conclusion does not follow from its premise. All Hegel is entitled to conclude here is that the amount of a number does not immanently reveal its limit. For this reason, it must be characterized as indeterminate. If conceived in this manner, then it follows that *we* (not the number itself) are forced to define a given number through the ones it excludes. However, the information we have available to us at the moment is that what it excludes is equally indeterminate. Thus our attempt to determine it purely conceptually leads to infinite regress (or progress).

This conclusion is directly suggested by the conception of number we have just reached. This also means that the “further determination” we should consider next is this infinite progress. However, Hegel abruptly switches to the consideration of extensive and intensive forms of quantum in the next section.

EXTENSIVE AND INTENSIVE QUANTUM

This section is divided into the following subsections: “Their Distinction,” “Identity of Extensive and Intensive Magnitude,” and “Alteration of Quantum.”

Their Distinction

The vague title of this subsection refers to the distinction between extensive and intensive magnitudes. We have not arrived at these forms of quantum immanently. Indeed, Hegel introduces extensive quantum by redefining the amount of a quantum: "Quantum, as we have seen, has its determinateness as limit in *amount*, which is discrete in itself." However, this amount is simply "a many." In other words, the many ones of an amount are indistinguishable from one another. This repeated information yields the definition of extensive magnitude: "Quantum thus with its limit [i.e., amount], which is in its own self [a] multiplicity [of ones], is *extensive magnitude*" (SL 252/250/217).

However, this definition of *extensive* magnitude fails to distinguish it from *continuous* magnitude. Hegel seems to be alive to this problem, for he immediately goes on to distinguish them externally through the comparison of these terms with their opposites. Accordingly, he now points out that "the direct opposite" of *extensive* magnitude is *intensive* magnitude, whereas the direct opposite of *continuous* magnitude is *discrete* magnitude (SL 252/250/217). Since they have different opposites, then they themselves cannot be the same.

Hegel proceeds to deduce extensive magnitude from yet another, somewhat roundabout, external consideration. "Continuous and discrete magnitudes ... are determinations of ... quantity in itself, that is, quantity as such, insofar as abstraction is made from the limit of quantum." This means that, if we abstract out the very limit that qualifies them as magnitudes or quanta, we return to quantity as such. Discreteness (punctuality) is the limit of the continuous quantum. Once we remove this limit, what remains is simply "the continuation of quantity without ... any limit." Likewise, without its own limit, without continuity, "discrete magnitude is" reduced to the atomistic ones. If so, in their isolation, neither can be a "specific quantum" or a number. Thus a "fully determined ... quantum," which is "a *number*," is obtained from taking them as the "two sides" of a quantum (SL 252-3/250-1/217).

This circular exercise seems to have brought us back to the conception of number. But Hegel assures us that this is not the case. The reason for this is that, "in number, the determinateness [i.e. amount] is explicitly posited as a [discrete] plurality," whereas the amount of extensive quantum is a plurality only "immediately"—it is not posited as a discrete amount. The result we now reach, adds Hegel, "is immediately

an *extensive quantum*—*the simple* determinateness which is essentially the *amount* of one and the same unit” (SL 253/251/217-8).

Why he thinks this conclusion follows from the consideration given in the previous paragraph is difficult to divine. For instance, as McTaggart rightly complains, it is not clear why “plurality is more explicitly posited in ... Number” than it is in extensive magnitude.² In other words, Hegel’s definition of extensive quantum is indistinguishable from the general definition of number he has given us earlier. It seems to me that Hegel is here secretly presupposing different forms of existential quantum. The kind of number he now has in mind refers to the amount of individual items, such as five fingers. Extensive quantum, on the other hand, is derived from the spatial magnitude of an entity, such as the length of a piece of land. The ones included in the former amount are “posited” as discrete, whereas the ones of the latter amount are not. For instance, unlike five fingers, ten meters, understood as the magnitude of a piece of land, is an extensive quantum, which does not have actually separate and distinct ones (i.e., meters).

At any rate, Hegel’s aim now is to derive, by means of another abstraction, continuous quantum from extensive quantum, which he now calls “number.” He begins with the extensively determined number: “the determinateness of the magnitude of something by a number does not require it to be distinguished from another magnitude.” For instance, we do not numerically determine the spatial extension of a body by comparing it to something else. However, Hegel needs to express this simple observation speculatively: “in number,” as extensive magnitude, the limit “is posited as enclosed in one being-for-itself, and so has the externality, [namely,] the relation to other, *within itself*” (SL 253/251/218). Again, “the one” refers to the magnitude of an extensive something we are determining numerically as a whole. Since, abstractly conceived, the one (as a unit) is the other (“externality”) of the many (the amount) it contains, and since this amount is “within” the one extended body or unit, the one is internally related to, and so is limited and determined by, its own otherness.

We might think that this consideration has brought about a more adequate form of quantum, one which is self-determining. However, this is not the point Hegel wishes to make here. His point is that this extensive quantum ultimately proves to be identical with intensive quantum. In other words, we now observe that “the continuity of each of the many” discrete ones found in the extensive magnitude of something

“is the same as the others.” “Thus the many ... is reduced to ... a simple oneness.” In short, “the externality that [formerly] constituted the ones as a plurality vanishes in the one as the relation of number to itself” (SL 253/251/218).

As I see it, by repeating the same argument several times, Hegel thinks he has successfully converted the amount of a quantum to *intensive* quantum. In other words, the initial removal of the discreteness of the many ones of an amount, Hegel believes, converts discrete quantum to extensive quantum. When this procedure is repeated, we get intensive quantum. Thus, with this extra vanishing of the plurality or discreteness of its amount, a quantum “passes over into *simple determinateness*,” which is called “intensive magnitude” or “*degree*” (SL 254/251/218).

In short, what we have here is entirely an external and arbitrary procedure in which the amount of quantum has gone through various stages of abstraction, which resulted in the form of quantum that lacks discreteness or extensiveness, though Hegel would rather claim that the degree determines itself by excluding discreteness and extensiveness from itself. In this sense, or for this reason, it implicitly or negatively includes them within itself.

Accordingly, “a degree is determinate magnitude, a quantum,” though it is not “an aggregate or several *within itself*; it is only a [simple or abstract] plurality [*Mehrheit*]” (SL 254/252/218). Hegel means to make two related points with this ambiguous statement. First, the degree is the aggregate plurality expressed as a simple determinateness—a “gathering together” of the discreteness of the amount of extensive quantum. Second, this simple determinateness, as *Mehrheit*, is, implicitly so, more or less. More and less will become relevant shortly, though we note that it is simply introduced through Hegel’s play with words.

As it turns out, even though we are in the habit of attributing number to it, a degree does not have the kind of amount number has. For instance, “the tenth ... degree” is not an “amount of ten [discrete] degrees.” It is therefore “only *one* [simple and intensive] degree, the tenth.” In other words, the tenth degree “entails [only] the determinateness implied in the amount ten.” Thus, “as a *simple* determinateness,” it is “a *sublated* amount”—or is a simple determinateness as a result of this so-called sublation, which is really an abstraction (SL 254/252/218-9).

We should bear in mind here that a degree is not simply a simple intensity. It is *this* as a consequence of the series of abstractions Hegel has made from the discrete amount, though Hegel prefers calling this

process “sublation.” Therefore, the degree is also determined *as* that from which it has been abstracted. In other words, one side of its determination is this abstraction or exclusion; the “degree” is the intense negation of discrete amount, which means that the latter is its negative limit. It is in this negative sense that degree is called “a *sublated* amount.”³ If so, “the [affirmative] amount is no longer posited in” the degree, since *this* amount is “placed outside” it. Therefore, the degree is in “its own self simple,” *sublated* amount in the sense that it excludes “this external otherness,” namely, the affirmative amount (SL 254/253/219).

This conclusion suggests that intensive quantum is also self-contradictory. However, this is not the conclusion Hegel wants to consider here. Rather, the conclusion he thinks he has reached is that extensive and intensive forms of quantum or magnitude are distinct in the following sense. Whereas extensive magnitude has its amount affirmatively within itself, intensive magnitude has it externally, though this externality is in it as a sublated, abstract amount. This is their main distinction.

Notice that this distinction depicts the distinction between the more concrete form of number and intensive quantum. In fact, it is abstracted directly from the amount of the kind of number in which the discreteness of the amount is posited. In other words, Hegel has not really shown that intensive and extensive forms of magnitude are distinct. Perhaps what he really meant to say is that intensive quantum also excludes extensiveness, and so is negatively determined as not extensive. If so, their distinction is that extensiveness is affirmatively posited in one and implicitly or negatively implied in the other.

Identity of Extensive and Intensive Magnitude

First, Hegel asserts that a “degree is a simple magnitude-determinateness among a plurality of such intensities.” He plausibly but externally assumes here that the excluded many are also degrees. However, his claim that they are distinct “from each other” remains unjustified, especially since he maintains that their distinction lies in the fact that they are more or less than each other (SL 254/253/219). In other words, we have as yet no reason to believe that the excluded degrees are in any way more or less than each other. We will return to this problem subsequently.

Since each is “only a simple self-relation,” all these degrees “are at the same time essentially related, so that each has its determinateness in this continuity with the others.” This conclusion is plausible, provided that we conceive these degrees as the moments of a whole, such as the circle. However, it is not clear how this conception can be reached from the claim that each degree is “only a simple self-relation.” As I see it, Hegel presupposes such a qualitative whole, which allows him to conclude that “each one of the plurality [of degrees], which are distinct, is not separate from the others, but has its determinateness only in them,” or as a member of, and in relation to, all of them as a whole. Thus the relation of one degree to the many degrees outside it (to its “externality”) is “the not-indifferent relation to externality” (SL 254-5/253/219-20). To put this differently, both the being and comprehension of a degree of the circle, for instance, depends on its membership in the circle.

Thus a degree of a specific something is essentially “a simple one *of* a plurality [emphasis added].” “If, therefore, the plural [ones] as such are outside the simple degree ..., the determinateness of the degree consists in its relation to them;” it is determined by them negatively as an excluded and excluding specific degree. According to Hegel, and once again, this means that a simple degree “contains amount” within itself, though not in the form of a posited discrete amount. In other words, it contains the many “discrete” ones as a sublated amount, “as the continuity [read *intensity*], which this determinate degree [*Mehrheit*] simply is” (SL 255-6/253-4/220).

For example, insofar as the twentieth degree “is a simple determinateness ..., it excludes ... [the other degrees] from itself and has its determinateness in this exclusion.” To repeat, and we are basically repeating ourselves, his point is that the twentieth degree is determined in this very act of, or by, this very exclusion. Without this exclusion of the amount of twenty continuous degrees, it cannot be grasped or determined as the twentieth degree. Consequently, “the twentieth degree contains the [amount of] twenty within itself,” though only negatively (SL 256/254/220).

Hegel’s next point, which is the main point of this subsection, is very difficult to justify. “Insofar as the amount is its own ... determinateness, and so is at the same time essentially an amount, [the degree] is an extensive quantum.” Consequently, “extensive and intensive magnitudes are ... one and the same determinateness of quantum” (SL 256/254/220). The idea here seems to be that intensive quantum

is, in itself, extensive quantum, and so turns out to be *logically* identical with it. However, even if we accept the (Hegelian) logical aspect of this conclusion as valid, Hegel has not shown that the sublated amount of the degree is necessarily extensive. In other words, it is not true that all magnitudes of degree are extensive magnitudes.⁴

Hegel proceeds with two “Remarks” (SL 257-61/255-9/221-4). In the first remark, he provides some concrete examples to illustrate the identity of extensive and intensive magnitudes. In my view, and to put this politely, Hegel’s attempt to prove his claim through these examples is utterly unsuccessful. I skip both this and the second remark in which Hegel fruitlessly discusses Kant’s application of degree to the soul.

Alteration of Quantum

This is the third and final subsection of the section called “Extensive and Intensive Quantum.” Hegel is now to discuss the “alteration of quantum.” Notice that this section is not called “the alteration of intensive and extensive forms of quantum.” Rather, he is about to use intensive quantum as his example to illustrate the alteration of quantum in general. It is thus clear that the previous two subsections have very little bearing on the argument Hegel is about to make in this one. Indeed, all Hegel needs in this subsection is the conclusion he has reached in “Number.” Perhaps he thought that intensive quantum or degree represents the concept of quantum more purely than do the other forms of quantum. “In degree,” he says, “the *concept* of quantum is *posited*” (EL 165).⁵

At any rate, Hegel begins this subsection by repeating the claim that quantum (1) is now “posited as the simple, *self-related* determinateness,” which (2) has its “determinateness, not in itself, but in another quantum” (SL 261-2/259/224-5). Thus the claim that intensive quantum is extensive in itself is no longer relevant. What is relevant is that quantum is a sublated amount of degrees.

This conception of quantum implies the necessity of its alteration, says Hegel. Thus “a quantum ..., in accordance with its quality [i.e., in accordance with its intrinsic nature or concept], is posited in absolute continuity with its externality, with its otherness.” For this reason, “not only *can* [a quantum or magnitude] transcend every magnitude-determinateness, not only *can* it be altered, but it is *posited* that it *must* alter” (SL 262/259/225). This troubling claim already anticipates the

infinite alteration of quantum. What is not yet explained is the sense of self-alteration quantum must undergo.

Hegel's explanation is that this self-alteration of quantum "consists in [its] increase and decrease." This necessity makes quantum behave like "the one" in that it also "repels itself from itself." However, the repulsion of the one is "the producing of that which is the same as itself." In contrast, the self-repulsion of a quantum is "the producing of its otherness," which is another quantum that is qualitatively different—since it is either *more* or *less*. In short, "it is now posited in it" that quantum must "*send itself beyond itself* and to become an other," precisely because "it is in its own self the externality of the determinateness," that is, it is in itself its external other (SL 262/259-60/225).

According to Winfield, this necessity is "expressly evident with degree, for degrees are such that the quantity they have is bound up with quanta beyond them. Each degree has its determinacy as, for example, 100th, only insofar as there is a 101st degree." Since the 101st degree has its determinacy beyond itself also, ad infinitum, we "have a specifically quantitative infinite."⁶ I fail to see how the fact that each degree is "bound up with quanta beyond" itself necessarily requires it to become more or less. Even if we accept that each degree "has its determinacy" in the next degree, it still does not follow that it must itself become that degree.

According to Findlay,

Hegel's language of dynamic conceptual growth [of a quantum] is perhaps confusing and undesirable, as his statement that such growth is a matter of necessity, not merely of possibility. But by the endless growth of one notion of endless magnitude into another he means no more than that all such notions are parts of a single, indefinitely extendible system, and by the necessity of such growth he means no more than that membership of such a system is implied by their notional content. These surely are acceptable views.⁷

Findlay's charitable reading ignores the fact that Hegel's ensuing discussion depends on the said necessity. What Hegel intends to establish next is the necessity of infinite alteration.

QUANTITATIVE INFINITY

This third section of the chapter on quantum explicates the concept of quantitative infinity, expectedly, in three subsections: “The Concept of Quantitative Infinity,” “The Quantitative Infinite Progress,” and “The Infinity of Quantum.” This section is mainly responsible for the exaggerated length of “Quantity.” Most of its length is due to the five “Remarks” it contains, especially the two on mathematics and differential calculus. I must leave the assessment of these two remarks to professional mathematicians.⁸

The Concept of Quantitative Infinity

Hegel repeats here that “quantum alters and becomes another quantum.” The reason why this happens, he says, is that quantum, in its concept, is posited “as being immanently self-contradictory.” On the one hand, as “*it continues* itself into its otherness,” a quantum “becomes an other.” But the other into which it continues itself is “also a quantum” (SL 263/260/225). The anticipated contradiction has not been articulated yet. In other words, there is nothing contradictory about the fact that one quantum becomes another quantum, which is either more or less than it.

What we have thus far is simply that one quantum becomes another quantum. In this sense, each distinct quantum is the *other* of the other quanta. However, Hegel now claims that the *other* “is not only the other of a quantum, but of quantum itself, the negative of quantum as limited.” This “negative” or the “other” of a quantum is the quantitative “*infinity*,” which is not quantum (SL 263/260/225-6). Thus one sense of *other* is replaced with another sense of *other* with a sleight of hand. With this move, the other into which a finite quantity (a quantum) passes is the infinite quantity.

Hegel now reasons that, “if we directly compare these moments with each other, we find that the determination of the finitude of quantum ... is likewise the determination of the infinite.” What he means to say is that they determine themselves in the same way, which is that each is “the flowing-out-of-itself to an other in which its determination lies.” The anticipated contradiction “is present ... in the *quantitative infinite progress*” (SL 264/261-2/226), which will be considered next. Hegel’s present argument is also problematic. But let us first see what he has to say about this progress.

The Quantitative Infinite Progress

“The progress to infinity is in general the manifestation of contradiction, which is here contained in the quantitative finite or quantum as such.” Notice that Hegel here locates the said contradiction in the “quantum as such.” The progress in question, and hence “the manifestation of contradiction,” has to do with its “alternating determination” as “the finite and the infinite.” Thus, “in the sphere ... of quantity [which is infinite], the limit sends itself, and continues into, its beyond; conversely, the quantitative infinite is also posited as having quantum within it” (SL 264-5/262/227).

The supposed reason behind the latter claim is that the quantitative infinite is simply determined as the self-repelling of the limit of quantum, and so must include the self-repelling quantum in itself. However, notice that “the quantitative infinite” Hegel describes here is necessarily a finite quantum, which is erroneously called “infinite.” In other words, what he describes here is the step-by-step increase or decrease of a quantum, which must necessarily be a finite quantum at each step. Thus the problem Hegel tries to grapple with in this context reduces itself to the same reoccurring problem, which is the indeterminacy of quantum as such.

However, Hegel now presents this problem as “the *task* of obtaining the infinite,” which the infinite progress, as “the perpetual *production* of the infinite,” fails to accomplish. As we see, the misrepresentation of the task at hand has led to a nonsensical claim. In other words, it makes little sense to speak of “the perpetual *production* of the infinite.” What must be said instead is that “the perpetual production of the *finite* (a quantum) as more or less cannot ever obtain the infinite.” In other words, as Hegel himself maintains, “the infinite [cannot ever] become a positive presence” (SL 265/262-3/227).

Yet, Hegel continues to call the progressing finite “the infinite.” The latter, as “the beyond” of the finite “is recalled from its flight” and “the infinite is [fleeting] attained.” However, the attained infinite “again becomes a quantum,” since “only a new limit has been posited.” Since the new limit is also posited “as a quantum,” it “has also fled from itself, is as such beyond itself and has repelled itself into its non-being,” which is the infinite. This flight of the affirmatively present infinite into the beyond goes on “perpetually” (SL 265/262-3/227).

Once again, for the reasons I have given earlier, Hegel’s description of the said progress as alternation between the finite and the infinite

is nonsensical. As he also admits, the infinite is never attained, which means that the finite never becomes infinite. Thus the “task” at hand again reduces itself to the trivial but valid observation that, if we begin with a finite quantity and keep going beyond it, we will never escape the realm of finitude or quantum. But Hegel needs to keep the infinite so that he can maintain that the progress in question entails a contradiction, namely, that the finite determines itself as the infinite, and the infinite determines itself as a finite quantum. The so-called contradiction, then, depends on the confused, if not mischievous, misuse of the term “infinite” in this context.

The expressions of “infinitely great or infinitely small” express this contradiction, Hegel now claims. “Since both still have the determination of quantum in them, they remain alterable, and the absolute determinateness, which would be a being-for-itself, is thus not attained.” This constitutes a contradiction because “the quantum is *preserved* in perpetual opposition to its beyond” in both expressions. Hegel’s profound idea here is simply this: these expressions imply that a *quantum* (implied in “great” and “small”) is said to be infinite, and so is not a quantum. In order to avoid this problem, we might try to “extend,” say, the “infinitely great.” But, claims Hegel, “however much it is extended, the great diminishes to insignificance,” for it fails to attain the truly significant absolute determination, namely, the true infinite being-for-itself. Therefore, “the extended quantum ... has not gained anything from the infinite, which is now, as before, the non-being of the same [i.e., quantum]” (SL 265-6/263/227-8).

It is not necessary to entangle ourselves in what here seems to be an exercise in word-mongering. The so-called contradiction simply emerges from an unfulfilled expectation, the necessity of which remains obscure. In other words, “the infinite progress remains” an unattainable “goal” (SL 266/263/228). It does so because Hegel tries to obtain it from an impossible progress, one in which we advance from a finite quantum in incremental steps. On the one hand, this is simply a fruitless, ill-conceived exercise, which has nothing to do with logical conception of the infinite. On the other hand, such a progress cannot be conceived as a contradiction.⁹

Ultimately, Hegel is entangled in the aforementioned progression from a finite quantum, which progression is now “to be designated as the *spurious quantitative infinite*.” Such an infinite progression of a quantum is just “a repetition of one and the same thing,” namely,

“positing, and sublating” its limit. This highlights the “impotence of the negative, for what ... [the finite] sublates is continuous [identical] with it” in the sense that it too is a quantum. Thus, “in the very act of being sublated [the quantum] returns” simultaneously to itself and to the negation of itself. In short, the quantum and its limit both “flee from each other” and remain “inseparable” (SL 266-7/263-4/228).

The Infinity of Quantum

Hegel’s main aim in this section is to bring the infinite progress to a halt by placing it within *an* intensive quantum or a degree. Hence, the title of this subsection (ambivalently) refers to the “infinity,” which will turn out to be just a quantum *within* another quantum.

To recall, a “quantum as degree is simple.” Its “determinateness is external to it.” As we have seen, this “externality is in the first place the *abstract non-being* of quantum in general, [namely,] the spurious infinity.” Given where he wants to go next, what Hegel needs here is another quantum, not “infinity.” However, after having called it “the quantitative infinity,” he now needs to make an external adjustment. This is to say, he needs to convert it into another quantum. In order to do so, Hegel silently issues a self-correction. As I have suggested earlier, it was a mistake for Hegel to claim that, in repeatedly becoming another quantum, a quantum becomes the other of itself, namely, the quantitative infinite. Indeed, in his convoluted attempt to show that this progression necessarily fails to produce the infinite, Hegel was all along assuming that each step in the progress reestablishes the finitude of quantum. Accordingly, he now declares that the spurious infinity is “itself equally a quantum.” This is because, like a quantum, it is “limited,” and so has a beyond in which it seeks to find its limit. Consequently, “the quantum is ... *posited* ... in the infinite progress,” or the “infinite” progress is posited as a quantum (SL 280/276-7/238).

Hegel thinks that, with this conclusion, “the *concept* of quantum is restored.” In other words, “it has been shown that ... the infinite in truth is ... the negation of the negation.” The assumption here is that quantum was first determined as its negation, namely, the infinite. Subsequently, the infinite progression (the first negation) has been negated and, with this second negation, with the determination of the infinite as a quantum, the concept of quantum is restored. Therefore, what first appeared to be the “externality” or other of quantum is now

determined as “the opposite of itself,” namely, as quantum. Presumably, this double negation amounts to the sublation of the “immediacy,” and so indeterminacy, of quantum (*SL* 281/277-8/238). In my view, this is a fanciful way of describing what I just called a “self-correction.” But let us move on to the next problem Hegel has in store for us.

Next, Hegel claims that quantum is now determined as having the infinite, “which first appeared as the beyond, as its *own moment*.” This is another strange assertion. Indeed, it renders the next conclusion he wants to draw rather incomprehensible. What he should have said, and this is what his next conclusion clearly implies, is that the so-called infinite is just a quantum. It is the quantum that is beyond another quantum. In other words, we start our consideration with one quantum. It proves to be determined by the quantum (or by a series of quanta collectively) beyond it. We then conclude that this other quantum, regardless of how far we push it, remains a quantum. This second quantum remains indeterminate, unless we grant that it is related to the previous quantum. Thus, of necessity, we now have two quanta that are each other’s limit and negation, that mutually determine each other. This further means that they are inseparable and internally related. Consequently, they must together constitute a whole, of which they are but moments. We could, if we wish, embellish this formulation with Hegel’s dialectical language and say that “quantum is hereby posited as repelled from itself.” Consequently, “there are two quanta, which, however, are sublated,” and so “*are* only as moments of *one unity*,” which is itself a quantum (*SL* 282/278-9/239-40).

This “unity” is a third quantum, which is determined as the relation of its two moments. Likewise, its moments are determined not only in relation to each other but also as the moments of this unity. In other words, “each is valid [or meaningful] only in its relation to its other; and this relation [of the two quanta] constitutes the determinateness of the [third] quantum.” In this manner, quantum is “qualitatively posited,” though it is essentially a “*quantitative relation* [*Verhältnis*],” that is, the relation of the three quanta (*SL* 282/279/240).

Hegel’s transition to quantitative ratio is more succinctly expressed in *EL*: “When we look more closely” at the infinite progress of “numbers,” “it turns out that in this progression quantity [number] returns to itself, for the thought that is contained in it is in any event the determination of number by number, and this gives us *quantitative ratio* [or *relation*],” in which the “significance” of quanta lies “in their reciprocal relation to one another” (*EL* 168).

It seems to me that the main point of this chapter is expressed in this simple conclusion: quantum remains indeterminate, unless *we* conceive it as multiple quanta that are mutually or internally related.¹⁰ We now need to consider what is entailed in this new conception of quantum as a relation or ratio.

NOTES

1. The three page numbers included in the citation reference the following three texts: G.W.F. Hegel, *Wissenschaft der Logik. Erster Theil: Die Objektive Logik. Erste Abtheilung: Die Lehre Vom Seyn*, ed. Leopold Von Henning (Berlin: Duncker and Humblot, 1833) (Hegel 1833); G.W. Hegel, *Wissenschaft der Logik I. Erster Teil: Die Objektive Logik. Erstes Buch*, ed. Eva Moldenhauer und Karl M. Michel (Frankfurt am Main: Suhrkamp Verlag, 1969) (Hegel 1969b); *Hegel's Science of Logic*, trans. A.V. Miller (Amherst, NY: Humanity Books, 1969) (Hegel 1969a).
2. John McTaggart, *A Commentary on Hegel's Logic* (Cambridge, UK: Cambridge University Press, 1910), 52–53 (McTaggart 1910).
3. Stace has a different explanation: “in a hundred degrees of temperature [for instance], the 99th degree, the 98th degree, and so on, do not exist by themselves, nor lie outside the hundredth degree. The hundredth degree is the limit ..., the others being absorbed within it. Hence the limit, i.e. the hundredth degree, is in this case identical with the whole quantum.” Walter T. Stace, *The Philosophy of Hegel*, (New York, NY: Dover, 1955), 162 (Stace 1955). For similar readings, see Geoffrey R.G. Mure, *A Study of Hegel's Logic* (Oxford, UK: Clarendon Press, 1950), 66–67 (Mure 1950); David G. Carlson, *A Commentary to Hegel's Science of Logic* (New York, NY: Palgrave, 2007), 167 (Carlson 2007). Ultimately, this explanation does not accurately capture Hegel's reasoning in the present context. If I understand him correctly, Hartnack denies that Hegel's degree is the “absorption” of an amount, though he does not explain in what sense it is an amount. Justus Hartnack, *An Introduction to Hegel's Logic*, trans. Lars Aagaarg-Mogensen (Indianapolis, IN: Hackett, 1998), 32 (Hartnack 1998).
4. At this point, Hegel makes a puzzling transition: “With this identity, the *qualitative something* makes its appearance.” On the one hand, he seems to note a resemblance between the determination of a “*qualitative something*” and the way the degree is determined. The following sentence suggests the latter view: this “identity is the unity which is self-related through the *negation of its distinctions*.” This negative self-relation comes to “constitute the determinate being” of intensive quantum (SL 257/254-5/221).

By definition, as we recall, “this negative identity” with the negated other is “*something*,” or something proves to be this identity. To say this differently, and with Winfield, “in this whole discussion there are no applications of quantity to what is not quantity.” Richard D. Winfield, *Hegel’s Science of Logic: A Critical Rethinking in Thirty Lectures* (New York, NY: Rowman & Littlefield, 2012), 139 (Winfield 2012). Carlson similarly thinks of the present “qualitative something” it simply “made up of Quanta.” Carlson, *A Commentary to Hegel’s Science of Logic*, 170.

However, Hegel’s ensuing sentences suggests that he has already deduced the more developed form of something we will only encounter in the sphere of measure—that “something which is indifferent to its quantitative determinateness.” This qualitative something refers to the “substrate” (*SL* 257/255/221). The idea here, then, seems to be that the sublated identity of the two forms of quanta is found in concrete objects, which now makes its appearance. Rosen rightly thinks that the derivation of this form of qualitative something here is illegitimate. Stanley Rosen, *The Idea of Hegel’s Science of Logic* (Chicago, IL: The University of Chicago Press, 2014), 181–182 (Rosen 2014). In my view, Hegel’s foregoing conception of a system of degrees necessarily presupposes the presence of a qualitative something. However, whatever the case might be, the issue of qualitative something is dropped as abruptly as it is introduced, and perhaps should not be given much weight here. Cf. McTaggart, *A Commentary on Hegel’s Logic*, 53.

5. All quotations and citations from *EL* are from G.W.F. Hegel, *The Encyclopaedia Logic: Part I of the Encyclopaedia of Philosophical Sciences with the Zusätze*, trans. T.F. Geraets et al. (Indianapolis, IN: Hackett, 1991) (Hegel 1991).
6. Winfield, *Hegel’s Science of Logic*, 139.
7. Findlay, *Hegel: A Re-examination*, 173.
8. For several useful studies of Hegel’s mathematics, see Terry Pinkard, “Hegel’s Philosophy of Mathematics,” *Philosophy and Phenomenological Research* 41, no. 4 (June, 1981): 452–464 (Pinkard 1981); Simon Duffy, *The Logic of Expression: Quality, Quantity, and Intensity in Spinoza, Hegel and Deleuze* (Aldershot, UK: Ashgate, 2006) (Duffy 2006); John L. Bell, *The Continuous and the Infinitesimal in Mathematics and Philosophy* (Milano, IT: Polimetria, 2006) (Bell 2006).
9. For a similar complaint, see Charles Taylor, *Hegel* (Cambridge, UK: Cambridge University press, 1977), 248 (Taylor 1977). Findlay also complains that Hegel fails to demonstrate a real contradiction in this context. However, he puts the matter somewhat differently: the “contradiction lies in the conflict between such variability and the ideal of what is

internally rounded off and complete, an ideal which can in the last resort only be realized in the ‘Idea,’ the notion of self-conscious spirit,” which Hegel must be presupposing here. Findlay, *Hegel: A Re-examination* (New York, NY: Collier Books, 1958), 173 (Findlay 1958). I think Hegel’s ensuing remark, in which he criticizes Kant again, validates Findlay’s point. Hegel says there that the true infinite is only accomplishable by spirit (SL 268-9/266-7/237-8).

10. Taylor briefly expresses a similar view. Taylor, *Hegel*, 251.

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The Quantitative Relation

In this chapter Hegel discusses three forms of quantitative relations or ratios (*Verhältnis*): “The Direct Ratio,” “The Inverse Ratio,” and “The Ratio of Powers.” As it turns out, the problems associated with quantum still remain unresolved. The “*direct* ratio,” says Hegel, still exhibits the “contradiction of externality and self-relation” of quantum. Somehow, the *inverse* ratio emerges from this contradiction. Alas, this ratio is also marked by deficiency and contradiction. Consequently, Hegel transitions to “the *ratio of powers*.” This ratio or quantitative relation turns out to be “a simple self-production of the quantum,” for it is a simple “self-related unity” in which externality vanishes. Hegel calls this the “qualitative moment” of quantity, which is “posited in a simple determination and as identical with the quantum.” Consequently, quantum “becomes *measure*” (SL 381/373/315).¹ As John F. Findlay rightly points out, the “alleged ... dialectical advance” displayed in this chapter is utterly unconvincing,² as is the transition to measure.

THE DIRECT RATIO

In this ratio, which is “immediately *direct*,” “the determinateness of one quantum reciprocally lies in the determinateness of the other.” This means that there is “only one determinateness or limit of both,” which gives us “the *exponent* of the ratio” (SL 381/374/315). For instance, if the two quanta are 8 and 4, then we have 8:4, which gives the exponent, 2.³ This exponent is the determinateness or limit of both 8 and 4,

provided that they are taken *as* the sides of a ratio. Thus the ratio is in itself (implicitly) the exponent, and the exponent is in itself the ratio.

This further means that the exponent “is *self-related* in its own externality,” namely, in relation to the other two quanta (A and B). Thus the exponent, C, is “a qualitatively determined quantum only insofar as it has its own distinction, its beyond and its otherness, within itself.” Hegel calls this internal self-differentiation of the exponent “the distinction of unit and amount.” As *a* quantum, the exponent is a “unit.” As an amount, it is “the indifferent reciprocation of the determinateness, [namely,] the external indifference of quantum” (SL 381–2/374/315).

The “external indifference of quantum” refers to the fact that infinite number of combinations of two quanta can yield the same exponent. For example, 8:4, 16:8, 32:16, *ad infinitum*, give the same exponent, 2. Thus the direct ratio “can admit any possible magnitude [quantum]” in this specific sense. On the one hand, this means that the exponent is indifferent to its determinants. On the other hand, the other two quanta are not indifferent to the exponent, for “the value of their ratio ... depends solely on the exponent” (SL 382/374/316).

According to Hegel, the direct ratio has another deficiency or indeterminacy. On the one hand, one of the two quanta in the ratio “always remains [the same] unit,” and the other always remains “*the same* amount of that unit.” In our example, the denominator is always twice the numerator, or is the amount of two units. The presumed indeterminacy here is that the exponent “has the value ... of [either] amount or of unit.” Hegel illustrates this “contradiction” with the following example. To begin with, “if the quantum B [as unit] is measured in terms of quantum A as a unity, then the quotient C is the amount of such units” of B in A. In $A:B = C$ ($8:4 = 2$), C (2) is the amount of B (two 4s) in A. However, “if A is itself taken as amount, the quotient C” is a “unit” within A. In other words, A (8) contains 4 units of C, since it is necessarily $C \times B$ ($A:B = C$; $\therefore A = C \times B$; $\therefore [C \times B]:B = C$). The “contradiction” is that both A and C count as amount and unit. If so, complains Hegel, “there is no available determination” to firmly settle “which of the sides of the ratio should be taken as unit and which as amount” (SL 382–3/375/316–7). This, I take it, is a frivolous observation on Hegel’s part, which illustrates some form of indeterminacy, rather than a “contradiction.”

Due to these indeterminacies found in the direct ratio, reasons Hegel, “there arises a more real ratio in which the exponent has the significance

of the product of the sides. As thus determined, it is the *inverse* ratio" (SL 383/376/317). This is an inexplicable transition. On the one hand, Hegel has not shown how the new ratio "arises" from the direct ratio. On the other hand, the problems he attributed to the direct ratio can also be found in the inverse ratio. If so, the new ratio is not any "more real" than is the direct ratio.

THE INVERSE RATIO

As John McTaggart notes, the inverse ratio ($A \times B = C$) "appears to be called Inverse because the increase of one of the related quanta involves the diminution of the other" at an inverse rate, provided that the exponent remains the same.⁴

"As we have seen," claims Hegel, this "relation [or ratio] is the *sublated* direct relation [or ratio]" (SL 383/376/317). In this ambivalent sentence I think "the *sublated*" refers to the result we now have, and not to "the direct ratio." If so, the result we now have, the relation found in the inverse ratio, expresses a "direct relation" between the exponent and its moments. This was lacking in the direct ratio, according to Hegel.

The previous ratio, repeats Hegel, "was *immediate* and therefore not yet truly determinate." The inverse ratio contains a more determinate, direct relation. This is because its "exponent is regarded as a product, as the unity of unit and amount." Also, or for this reason, the exponent of the inverse ratio does not have the interchangeability (a deficiency) Hegel has discovered in the direct ratio (SL 384/376/317). This claim may be challenged: if (1) $A \times B = C$, then (2) $A = C:B$. Thus C is the amount of A and B in (1), and a unit of A in (2). Likewise, A is a unit of C in (1), and the amount of B and C in (2). Moreover, it can be easily shown that an infinite combination of two quanta can yield the same exponent in an inverse ratio also. In short, the "more real" ratio emerges from ignoring the less real, so to speak, aspects of the inverse ratio.

At any rate, Hegel's aim now is to discover deficiencies in the inverse ratio. "In the inverse ratio the exponent is likewise immediate and assumed to be a fixed quantum. But, to the *one* of the other quantum *in the ratio*, this quantum is not a *fixed amount*; on the contrary, this ratio, which was previously fixed [in the direct ratio], is now posited as alterable." This is to say, in the direct ratio, the ratio of the two quanta remains fixed by the exponent ($8:2 = 4$, $16:4 = 4$, etc., have the same fixed ratio, which is 4-1). This is not the case with the inverse ratio,

for the “ratio” of the two quanta is “alterable.” Thus $4 \times 4 = 16$ and $8 \times 2 = 16$ give us the “ratios” of 1–1 and 4–1, respectively. Therefore, and inversely put, “if in place of the unit on one side of the ratio [$A = 4$] another quantum is taken [$A = 8$], then the other side [B] is no longer the *same amount* of units of the first side.” In other words, in the first scenario, A (4) has 1 unit of B (4), whereas, in the other scenario, A (8) has 4 units of B (2). Consequently, “although the exponent” of the inverse ratio is regarded as fixed, “it is not preserved as ... [fixed, unalterable] in the side of the ratio.” Instead, “this side, and with it the *direct ratio* of the sides, is alterable [emphasis added]” (SL 384/376–7/317–8). Simply put, the problem for Hegel is that the inverse ratio is not a direct ratio. This, of course, is yet another trivial exercise, which exhibits a “deficiency” only for Hegel.

After several additional, repetitive, cryptic attempts to detect more contradictions and defects in the inverse ratio, Hegel returns to the alterability of the quanta in the inverse ratio. The aim now is to highlight another contradiction. Again, A and B alter *inversely* in the inverse ratio; in this alteration, “one of ... [the factors] becomes as many times smaller as the other becomes greater.” This can be easily observed in the following numerical examples: $8 \times 2 = 16$; $4 \times 4 = 16$. Hegel awkwardly says of this scenario that “the greatness [or magnitude] of each” depends “on it containing the greatness the other lacks.” This strange claim will become the source of another sophistry shortly. The idea here is that, when we use multiple sets of A and B to obtain the same exponent, A and B increase and decrease in a zero-sum manner, but inversely. In Hegel’s dialectical terminology, “each in this way continues itself *negatively* into the other.” For this reason, Hegel continues, “each is what it is only through the negation or limit posited in it by the other.” This simply means that, *as* the moments or factors of the exponent of an inverse ratio, the magnitudes of both A and B are determined in their relation to each other, since the magnitude of one quantum “is an indispensable [and so inseparable] factor in the” determination of the magnitude of the other. “This continuity of each in the other establishes the moment of unity through which they are in a relation.” Therefore, these quanta are identical in this Hegelian sense, that is, in the sense that what one quantum *is* (as a moment of the ratio) necessarily *depends* on the other. This is a qualitative relation or mode of determination. Moreover, since each is “the moment of ... the exponent,” the latter “establishes the *in-itself* [*Ansichsein*] ... of each” moment, which means again that they

are identical (*SL* 385–6/377–8/319). Indeed, this sense of identity (limit, in-itself) is related to the other sense of identity just mentioned, for the inverse alteration of the two quanta is conditioned by the exponent.

However, “their actual magnitude is distinct.” Since the two factors in a given multiplication (inverse ratio) are not necessarily unequal (e.g., $4 \times 4 = 16$), the distinction Hegel has in mind must refer to another sense of distinction. What he has in mind specifically is that, as one of the factors becomes more, the other becomes less. Thus they are both identical and distinct. As noted in the previous paragraph, Hegel describes this scenario as one in which “the greatness of each” depends “on it containing the greatness the other lacks.” This further means that “each only *is* insofar as it takes from the other a part of their common in-itself [*Ansichsein*],” which is the exponent. “But ... [each] can take from the other only as much as will make its own self equal to this in-itself,” namely, the exponent. Hegel maintains here that, “since each [of the two quanta] is a moment of the ratio only insofar as it limits the other, and is simultaneously limited by it,” it follows that each quanta “has its maximum in the exponent,” though “they cannot be equal to the exponent” (*SL* 386–7/378–9/319).

In other words, according to Hegel’s math, given $A \times B = C$, A cannot take from B an amount that would make it equal to C , for this would make B equal to “zero,” which is impossible. Mathematically speaking, this is a false conclusion, for if $A = C$, then $B = 1$, not 0. Consequently, Hegel’s claim that “they cannot be equal to the exponent” (*SL* 386–7/378–9/319) is also false, for if $B = 1$, then $A = C$. From this false premise, Hegel reaches the conclusion that the inverse ratio is self-contradictory.

According to Hegel, “this contradiction is again the [spurious quantitative] *infinity* in a new, peculiar form.” As we have seen previously, “the exponent is the *limit* of the sides [moments or factors] of its ratio.” In this ratio, these moments “increase and decrease relatively [and inversely] to each other.” However, we now assume, “they cannot become equal to the exponent.” Thus the exponent both *is* the limit [in-itself] and *not* the limit [boundary] of the two quanta on the other side. This contradiction is the characteristic of the spurious infinite, which always leaves an unobtainable “beyond.” Thus the exponent, C , is the “beyond” of A and B , “to which they approach infinitely, but cannot reach.” In this respect, the result is “the spurious infinity of the infinite progress,” which “is itself finite.” In other words, the infinite approximation is “bounded

by its opposite, by the finitude of each side and of the exponent itself" (SL 387/379/319–20).

Now, I hope, the infinite approximation Hegel has in mind cannot be about the impossibility of producing the exponent with the multiplication of two quanta. In other words, the criterion Hegel has established is that $A < C$ and $B < C$. Even if we accept this false criterion, it is still not true that $A \times B$ cannot equal C . For instance, when $C = 16$, 4×4 or 8×2 meet the criterion, and produce the exponent exactly. Relatedly, the said criterion does not necessitate the infinite process of approximation, for $A \times B \approx C$ does not issue from the criterion of $A < C$ and $B < C$. Consequently, I assume that Hegel has deduced $A \times B \approx C$ strictly from the (Hegelian) concept of becoming, which is itself deduced from the manufactured assumption that the limit both *is* and *is not* the limit (the in-itself of the two related quanta).

What we find here, Hegel now claims, is "the transition of the inverse ratio into a different determination than what it first had." As we have seen, the inverse ratio is first determined as two "immediate" quanta that relate to each other inversely in such a way that the increase of one quantum requires the "proportional" decrease of the other. In this sense, one quantum (A) is "what it is through its negative relationship with the other (B)." Moreover, "a third magnitude (C) is the common limit of ... their alternating increase" and decrease. In short, "in contrast to the qualitative moment as a *fixed limit*," *alternation* is now the "distinctive ... determination of variable magnitudes, for which the fixed limit [i.e., the exponent] is an infinite beyond" (SL 388/380/320). This means that the exponent itself is fixed in one respect and variable and indeterminate in another.

Hegel thinks the result reflects immanent development, which he calls "the *negation of the negation*." This negation of the negation presumably occurs in the following way. In the first place, "the exponent, already as product, is *in itself* the unity of unit and amount." Here, "unity" refers to the fact that these two moments are internally related, and so are identical with both each other and the exponent. In other words, "such moments," merely as moments and on their own, "do not have any other immanent limit, any fixed immediacy." This fact "is posited in the infinite progression," which is precisely "the negation of every specific [distinct] value" or negation they are supposed to have. What we have here, then, is "the *negation* of the externality [distinction or negation initially] displayed in the exponent," which is simultaneously

the negation of the distinction of the two quanta in the exponent, and of the distinction between these and the exponent itself. Consequently, “the exponent ... is posited as preserving itself in the negation of the indifferent [independent] subsistence of the moments.” This self-preservation or self-sublation takes the shape, as it were, of “uniting itself with itself.” Consequently, we once again reach the conception of being-for-itself. From this conclusion, Hegel transitions to the third form of ratio in a single sentence: “The ratio is now determined as the *ratio of powers*” (SL 388–9/380–1/320–1).

As McTaggart rightly points out, the reasoning behind this transition “is extremely obscure.”⁵ In my view, the “transition” to the next ratio is simply a summary of what Hegel expects to find in the ratio of powers. To put this differently, the kinds of “deficiencies” Hegel has discovered in the previous ratios can also be easily found in the ratio of powers, though he is not interested in doing so. At the same time, one could as easily “posit” that “the exponent” preserves “itself in the negation of the indifferent [independent] subsistence of the moments” in the other ratios as well. Indeed, in *EL*, Hegel transitions directly from the direct ratio to measure. This is done very economically in the following manner. “The *terms* of the ratio are still immediate quanta” in the sense that they exhibit quantitative externality. However, “according to their truth ..., even in the externality” of the terms found in the ratio, “the quantitative itself is relation to itself.” Thus “the ratio is *measure*” (*EL* 168–9).⁶ We will examine Hegel’s transition to measure shortly. My point for now is that the tortured path Hegel has taken in this chapter is completely superfluous, for the said self-relation of the quantitative determination could have been as easily (and problematically) deduced from the conclusion of the previous chapter, as well as from the other forms of ratio considered in this chapter.

THE RATIO OF POWERS

“Quantum, posited as identical with itself in its otherness,” and thus as the self-determining self-sublation, “has become being-for-itself” (SL 389/381/321). This conclusion is all Hegel needs before devising his transition to measure. However, he wants to deduce it once again from the ratio of powers.

The ratio of powers is a “qualitative totality” in the sense that it contains the qualitative determinations of quantum, namely, “the unit”

and “the amount.” Therefore, as such a totality, the ratio of powers contains, as its own “moments, the conceptual determinations of number” (SL 389/381/321). Why “number” is singled out here is difficult to divine.

Unlike “the inverse ratio,” the amount in the ratio of powers “is posited as determined only by the unit.” Hegel’s explanation for this is both obscure and entails certain qualifications that suit his present purposes. The main qualification is this: “insofar as” we consider “the alteration” of the unit into the amount, what we have here is “the raising” of the unit “to a power,” which is the amount. This means that “the otherness of the quantum [the unit?] is determined purely by itself.” Consequently, “in the power, the quantum is posited as having returned into itself; at once, it is itself and its otherness” (SL 389/381–2/321).

The amount is the *power* and the unit the *base* (root) of the said “ratio.” (Hegel also refers to the power as the “exponent.”) If the base unit is 4, and the power amount is 2, then we get 4^2 . (By the way, we can obtain the same value from 2^4 , which means that, if we so wished, we could find indeterminacies in the ratio of powers also.) Thus the unit posits itself in the amount as itself, since the amount is really two fours (4×4). Therefore, “the power is a multiplicity of units,” namely, an amount.” But this implies a distinction, for the unit is a single 4. Hegel conceals this problem with a trick: each unit in the amount “is this same multiplicity.” Clearly, each unit cannot be the same multiplicity as the whole amount. However, and this is the trick, each unit, as well as the base unit, is the same multiplicity in the sense that it is the same 4. In this manner, Hegel sublates the qualitative distinction found in the ratio of powers, that is, the distinction between the unit and the amount. Consequently, he reaches the previously stated conclusion that, “in the power, the quantum is posited as having returned into itself; at once, it is itself and its otherness.”

According to Hegel, it follows from this conclusion that “the exponent of the ratio (of powers) is no longer an immediate quantum,” which is the case in the other two forms of ratio. Rather, this exponent “is entirely of a *qualitative* nature [*Natur*].” In Hegel’s hands, this ratio has thus reduced itself to “a *simple* determinateness,” which is obtained from the obscure claim that the “amount is the unit itself.” This again means that “the quantum is *identical with itself* in its otherness.” Thus, in its totality, the truth of quantum is to be being-for-itself. In short, “the truth of [the] quality [of quantum] is simply ... [to be] quantity, or

immediate determinateness as sublated" (SL 390/382/322). To be so is its *qualitative* nature, for this result coincides with its concept.

This discussion concludes the numerically marked first part of this section. Its second section is entirely a repetition, which I skip. In the third section, Hegel deduces the category of measure. Before this is done, he notes that quantum is now "*posited* in accordance with its concept." However, with this self-positing, quantum "has passed over into another determination." Thus far, we have been under the impression that this self-positing of itself "qualitatively" involved only relations of quanta. As it turns out, quantum "has passed over" into a determination other than itself; "it has become the other of itself, [namely] quality" (SL 391–2/383/323). This transition from quantity to quality is simply an act of magic. As we will see shortly, it involves the conversion of the relation of two quanta, which are found in the ratio of powers, to the essential relation of quantum to a quality of something.⁷

In other words, what Hegel has in mind here is a "*double* transition." In this chapter, quantity has established itself as "the truth of quality," even though nothing of the sort has been demonstrated. On the other hand, in the chapter called "Being-for-itself," "the latter has demonstrated itself as passing over into" quantity. In short, the truth of each is the other, which means that quality and quantity are "no longer indifferent." Rather, they entail each other, and relate to themselves in relation to the other. This, then, is the "*double* transition," which is "required for the totality to be *posited*." In fact, "the necessity of the *double* transition is of great importance for the entire scientific method" (SL 392/383–4/323).

As a result of the "*double* transition," Hegel now declares that quantity "is thus quality itself in such a manner that, apart from this determination [of the quality of something by quantity], quality as such would not be anything at all." For this reason, and henceforth, "quantum is neither an indifferent nor an external determination" of quality (or being). As sublated, it is now that "quality, by virtue of which something is *what* it is [emphasis added]" in itself. Consequently, "the truth of quantum is to be *measure*," that is, to be the quantitatively determined quality of something (SL 392/384/323–4). Once again, Hegel has not justified this conclusion at all. Instead, all he has shown (illegitimately) is that both quality and quantity ultimately determine themselves identically as being-for-itself. Simply stated, I fail to see how this finding implies Hegel's conception of measure.⁸

NOTES

1. The three page numbers included in the citation reference the following three texts: G. W. F. Hegel, *Wissenschaft der Logik. Erster Theil: Die Objektive Logik. Erste Abtheilung: Die Lehre Vom Seyn*, ed. Leopold Von Henning (Berlin: Duncker and Humblot, 1833) (Hegel 1833); G. W. Hegel, *Wissenschaft der Logik I. Erster Teil: Die Objektive Logik. Erstes Buch*, ed. Eva Moldenhauer und Karl M. Michel (Frankfurt am Main: Suhrkamp Verlag, 1969) (Hegel 1969b); *Hegel's Science of Logic*, trans. A. V. Miller (Amherst, NY: Humanity Books, 1969) (Hegel 1969a).
2. John N. Findlay, *Hegel: A Re-examination* (New York, NY: Collier Books, 1958), 173 (Findlay 1958). Errol E. Harris adds that this chapter contains little philosophy. Errol E. Harris, *An Interpretation of the Logic of Hegel* (Lanham, MD: University Press of America, 1983), 140 (Harris 1983).
3. In Hegel's usage, "exponent" usually refers to the quotient of an equation, though it also refers to the whole equation at times.
4. John McTaggart, *A Commentary on Hegel's Logic* (Cambridge, UK: Cambridge University Press, 1910), 65 (McTaggart 1910).
5. Ibid.
6. All quotations and citations from *EL* are from G. W. F. Hegel, *The Encyclopaedia Logic: Part I of the Encyclopaedia of Philosophical Sciences with the Zusätze*, trans. T. F. Geraets et al. (Indianapolis, IN: Hackett, 1991) (Hegel 1991).
7. For a somewhat similar critique of Hegel's transition to measure, see McTaggart, *A Commentary on Hegel's Logic*, 66–8.
8. Hegel maintains that "Kant did not apply the infinitely important form of triplicity ... to the genera of his categories (quantity, quality, etc.); that is why he could not arrive at the third of quality and quantity," which is measure (*SL* 396/388/327). For the reasons I have already given, rather than *arriving* at the third, Hegel has simply presupposed it.

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PART III

Measure

Specific Quantity

PRELIMINARY ANTICIPATIONS

“Measure (*Das Maß*)” is the shortest of the three main parts of “The Doctrine of Being.” According to Hegel, “we can also consider measure as a definition of the Absolute” (EL 170).¹ We even get the impression that he thinks measure adequately captures “*the concrete truth of being*.” For this reason, it has been rightly “revered ... as something inviolable and holy” by “many peoples.” This reverence is revealed in the definition of “God” as “the *measure* of all things” (SL 399/390/329).²

Yet, as Michael Inwood notes, “the concept of measure” is more “applicable to a narrower range of phenomena” than it is to a “single framework” that systematizes the entire sphere of being.³ Moreover, in the final analysis, as Charles Taylor points out, “Hegel cannot accept that the quantitative characterization of things, even ... [as] Measure, touches even more than the surface of things.”⁴ Thus the godly grandeur of measure ultimately fades away into insignificance.

It is also doubtful that the contents included in “Measure” belong to pure logic, not to mention a “speculative” one.⁵ Hegel himself admits that, generally speaking, “the various forms in which measure is realized belong to different spheres of natural reality” (SL 401/392/331). Elsewhere, he repeats that “the science of *measures* ... presupposes the real particularity of things, which is found only in concrete nature.”⁶ As we will soon realize, Hegel presupposes such natural, concrete things throughout “Measure,” even though this presupposition has not been

properly justified. Relatedly, the “logic” we are about to encounter generally depends on observational facts.

To be sure, Hegel ultimately thinks that he provides a philosophical, logical science of measures. In this regard, he tells us that “the mathematics of nature, if it is to be worthy of the name of science, must be essentially the science of measures.” The “science” he has in mind is precisely the Hegelian logic, which claims to make sense of measures “from the concept,” and provides “a higher proof” in so doing. “There is still no trace of this kind of proof [either] in the mathematical principles of natural philosophy [or] in the other works of this kind” (*SL* 415–6/406–7/342–4).⁷ Alas, there are no such “higher” proofs in “Measure,” as we will soon come to realize.

“Measure” is divided into three chapters: “Specific Quantity,” “Real Measure,” and “The Becoming of Essence.” As the title of the third chapter indicates, Hegel’s general aim here is to transition from the sphere of being into that of essence. Along the path to this result, Hegel also wants to arrive at the conception of being-for-itself in the sphere of measure, which he does numerous times. The idea here is that measure is that totality in which quality and quantity not only determine each other but also prove to be infinitely self-related. However, Hegel will suddenly reveal that measure is deficient in several different ways, which are too complicated and obscure to summarize here. The transition into essence is derived from these deficiencies, which somehow suggest the mode of determining we find in the sphere of essence. As we will see, apart from the problem of transition, how Hegel gets to the point of the said transition is also very problematic. Overall, “Measure” is very poorly organized, and fails to present a coherent whole.

“Specific Quantity,” which we are about to discuss in this chapter, is further divided into the following three sections: “The Specific Quantum,” “Specifying Measure,” and “Being-for-itself in Measure.” The main aim of this poorly organized chapter is unclear. In its first section, Hegel basically informs us that each thing has a specific quantum, which is its measure or quality.⁸ This quantum is alterable only to a certain point, beyond which the quality it determines ceases to exist. However, this line of thought is suddenly abandoned—it is taken up again in the next chapter. In the first subsection of the second section of this chapter, he first considers “the rule,” which is quickly dismissed as an arbitrary, external measure. In the second subsection, he takes up the issue of how the specific heat or “temperature” of things is quantitatively specified in

a ratio. The conclusion he reaches here is that the exponent of this ratio ultimately expresses the measure relations of the specific heat capacities of two things. This is called “the *realized* measure,” which is now conceived as the relation of two measures (or qualities). In the third subsection, Hegel abruptly switches to the consideration of the ratios that measure motion. Here the relationship of time and space come into play. From this consideration, Hegel ultimately deduces the conception of measure as a being-for-itself. In the third section of this chapter, Hegel reiterates why this is so. However, he declares that this *one* being repels itself into two material things, each one of which has a specific measure. This conclusion constitutes a retreat to an earlier position, as we will see.

THE SPECIFIC QUANTUM

Hegel begins this section with a description of measure as such. First, “measure is the simple relation of the quantum to itself, its own determinateness within itself; thus quantum [as the measure of something] is qualitative.” As he will reveal shortly, this means that measure, taken only as a quantum, is a relation of two distinct quantitative aspects, and so is “qualitative” in this quantitative sense. As the unity of these aspects, measure is “an immediate quantum.” This unity is only one aspect of measure. The other immediate aspect of measure “is the quality belonging to” it. *This* “quality” of measure refers to “some specific quality or other,” which is a “specific determinate being,” a specific quality of a “something” (SL 403/394/333).

The underlying idea here is that a specific something (or a quality) is not “indifferent” to its specific “quantum.” Even though this quantum is “distinguished” from the something (also called “quality”), neither “transcends” the other. Hegel takes this to mean that they collapse into each other. Thus, because they belong together in one reality, they collapse into a “simple identity [*Gleichheit*].” In short the specific quantum “is inseparable from a specific determinate being” (SL 403/394/333).

In an already familiar fashion, Hegel ambivalently states here that they are inseparable and immediately identical. Of course, the latter option is absurd; if pursued to its logical conclusion, it would lead to silly propositions about reality, such as the proposition that 0–100 °C is identical with water. Here, the aforementioned problem of conceiving the quality (self-identity) in terms of measure is thrown into sharp relief. Thus, and to say this very generally for now, we must henceforth,

and charitably, think of measure as an important characteristic of things, rather than that which establishes their unique identity. We should also observe here that the preceding descriptions, as well as the ensuing ones, presuppose observational facts. For instance, one cannot logically deduce from the concept of something, even a specific something, the conclusion that it has a specific quantum with which it has a *dependent* (not-indifferent) relationship. At any rate, we now take it for granted that this specific quantum is the measure of the specific something.

But, declares Hegel, “*all that is there has a measure*” (SL 403/395/333). This is another troubling declaration. Hegel, as we have seen, defines measure as the specific quantum of something. However, it is not true that everything that is there has a measure in this sense. Hegel seems to admit as much in *EL*, though he quickly gets around the problem with a vague assertion. First, he points out that “the qualitative character of a rock in a river is not bound up with a determinate magnitude.” Then, he adds that “a closer study shows that even objects like these are not utterly without measure, since chemical investigations reveal that the water in a river, and single constituents of a rock, are again qualities that are conditioned by the quantitative ratios between the substances they contain” (*EL* 170).⁹ We do not need to question Hegel’s science of chemistry to observe that he fails to show that rock as such has a specific quantum. What Hegel himself observes here is that qualities *other than* rock have quantitative ratios, which condition each other under certain, external conditions. In short, Hegel’s conception of measure is not generalizable.

As noted previously, “something is not indifferent to this magnitude, so that if this were altered it would continue to be what it is; on the contrary, an alteration of the [specific] magnitude would alter the quality of the something.” Here, Hegel draws a distinction between a something and its quality; this quality is susceptible to destruction by quantitative alteration. In this respect, “quantum, as measure,” is the “limit” or “the determination of the thing.” In other words, if its quantum were to be “increased or decreased” beyond a specific quantum, the said quality would “perish” (SL 403–4/395/333). The specific quantum of things has just been defined; giving this definition is the main point of this section.¹⁰

Hegel now returns to the issue of the two moments of a specific quantum which, together, make up one aspect of the measure of something. Basically, the specific quantum (“the quantitative determinateness”) “of a determinate being is twofold,” or has two aspects: the aspect with which its quality is “bounded” and the aspect that can alter without

changing its quality (SL 404/396/334). The first aspect may be called “qualitative” in the sense that the quality of something is not indifferent to it, whereas the second aspect is quantitative for the opposite reason.

According to Hegel, it thus “follows that the destruction of anything ... happens when its [specific] quantum is altered” (SL 404/396/334). In other words, a quality is destroyed when the limit of its specific quantum is transcended. This conclusion follows from the assumption that a specific quality depends on its specific quantum. However, and once again, the assumption is not generally applicable. For instance, it cannot say anything useful about the quality of being *table*, which has no *specific* quantum.

Be that as it may, Hegel’s aim here is to highlight the following perplexity: the qualitative change appears to be both sudden and gradual. He defends the view that qualitative change is actually a “leap,” which nevertheless happens in conjunction with the necessarily gradual (continuous) quantitative alteration. Here, Hegel summarily dismisses the gradualist explanation of qualitative change for explaining precisely “nothing” (SL 404–5/396/334–5). He will return to this issue in “Nodal Line of Measure Relations,” which is presented in the next chapter.

Hegel now turns his attention to that naïve consciousness, which fails to recognize that “what appears to be a purely quantitative change also turns into a qualitative one” (SL 405–6/397/335). This is yet another ill-conceived claim, for it is not true that qualitative change results from “a purely quantitative change.” We will return to this problem shortly.

Hegel adds that “collusion” is entailed in this ignorance. This collusion or contradiction was illustrated by “the ancients in popular examples,” or “*elenchi*,” such as “‘the bald’ and ‘the heap’”. “In these *elenchi*, according to Aristotle ..., one is compelled to say the contrary of what one had previously said.” In order to induce this inconsistency, “they asked: does the extraction of a single hair from the head or from a horse’s tail produce baldness, or does a heap cease to be a heap if a grain is taken away?” (SL 405–6/397/335).

These *elenchi* were likely invented by the Megarics who were sophists, though Hegel denies here that sophistry was their main motivation in creating these *elenchi*. The contradiction intended by the inventors of these *elenchi* has to do with answering the same question both affirmatively and negatively. For example, one initially denies that the extraction of a single hair from a head produces baldness. However, when the same question is repeated many times over, one ends up admitting that pulling

out a single hair produces baldness. Thus one answers the same question both negatively and affirmatively.

Hegel somewhat misrepresents the contradiction here, as if it had only to do with whether or not repeated pure quantitative change leads to a qualitative change.¹¹ Consequently, he concludes that, “in this admitting [of the negative answer], what was overlooked was not only the repetition [of extraction], but the fact that the individually insignificant quantities *add up*, and that the sum constitutes the qualitative whole, so that at the end the head is bald.” According to Hegel, “the falsity” stems from “assuming” that this quantity is “only an indifferent limit.” This assumption is “confounded by the truth to which it is led, [namely,] that quantity is a moment of measure and is connected with quality” (SL 406/397–8/335).

According to Hegel, the mistake stems from reducing the quantum to “the abstract [indifferent] determinateness of quantum.” In other words, the treatment of this quantum merely as an “indifferent limit,” merely as a quantum in which its “quality does not come into play ..., is the *cunning* of the concept” (SL 407–8/398/336). As we see, it is Hegel who is confused here. On the one hand, no reasonable person would assume that a certain *amount* of *hair*, which is a certain *quantity* of a *quality*, is just an abstract quantum. On the other hand, Hegel seems to assume that the sum of extracted hair is purely quantitative, and the absence of this specific sum or quantum implies baldness—a qualitative change.

In a very cryptically constructed passage, Hegel suddenly introduces a new theme or “category,” namely, “a *specifying*” of measure (SL 408/398/336). As John McTaggart points out, *specifying measure* does not appear to be “a new category at all. Two Quantities were involved in the idea of [specific] measure from the beginning—the Quantity which exists [with the given Quality], and the other which marks [or specifies] the point of transition into a fresh Quality ... Thus Specifying Measure takes us no further than Specific Quantum.”¹²

Well, there is and there is not a new category here. We do not have a new category in the sense McTaggart has just noted. Indeed, the course of Hegel’s progress should have led to the introduction of the category of the *nodal line*. In fact, it is telling in this regard that Hegel directly moves from specific quantum to the nodal line in *EL* (EL 171–2). However, this is not what we find in *SL*, which introduces the nodal line in the middle of the next chapter. What follows next in this chapter are

two additional sections. The first of these sections is titled "Specifying Measure," and contains a subsection with the same title. It is here that we encounter a different conception of specifying measure, but one that Hegel has not properly justified or introduced. A comparison of the first and the second editions of *SL* would readily show that Hegel shuffled things around and added more material to the latter. As we will see, this reshuffling has produced a confusing and redundant arrangement of various sections and themes in the second edition.

SPECIFYING MEASURE

"Specifying Measure" is divided into three brief subsections: (1) "The Rule," (2) "Specifying Measure," and (3) "Relation of the Two Sides as Qualities."

THE RULE

In *EL*, Hegel's commentary on "the rule" (*Die Regel*) amounts to a single-sentence definition: the quantitative "increase and decrease without the sublation of measure ... is a *rule*" (*EL* 171). This definition of the rule refers to the merely quantitative alteration of measure. The definition of the rule given in *SL* is quite different. Here, Hegel introduces the rule by saying that specifying measure "is first a rule" (*SL* 407/398/336). Generally speaking, *specifying* measure refers to any measure that *specifies* something in some sense. The rule is a species of specifying measure; it is called a "standard," which is an "arbitrary magnitude" we use to measure another something of a different qualitative nature; "this other something is *measured* by the rule." As an arbitrary quantum, the rule is merely an external measure, and the measurement made by it is "an external act" (*SL* 408/399/337). In other words, "insofar as [one thing is] used as a standard for [measuring] other things, it is an external measure, not its [or their] original measure." Moreover, the *standard* we use to measure things is "a matter of arbitrary choice" or convention (*SL* 404/395/334).

However, adds Hegel, "measure is not merely an external rule." Rather, it is what something is "in itself." Since we are looking for the "immanent" measure, which is "a quality of something" (*SL* 408/399/337), we transition from the rule to another form of specifying measure, which we call by the same generic name, "specifying measure."

SPECIFYING MEASURE

Hegel first presupposes the presence of two things, one of which is a measurable (or measured) something and the other with which it is measured. This measuring thing is also called “measure.” “Measure is [thus] a specific determining of the *external* magnitude, i.e., of the indifferent” magnitude of a thing. In the act of this determining or measuring, this indifferent magnitude of “the measurable something ... is ... posited by some other existence.” In other words, one something’s magnitude “posits” or specifies the magnitude of another something. This is similar to the rule, except that “this immanent measuring standard is a quality of the something to which is compared the same quality of another something” (SL 408/399/337). What Hegel has in mind here is exemplified by the determination of the specific heat capacity of one thing in relation to the same capacity of another thing.

Hegel observes next that “the something has in it this side of being-for-other, which is the indifferent increasing and decreasing.” This basically means that the indifferent, alterable aspect of the magnitude of the quality of something is not strictly determined by that something itself. This aspect is (also) altered by the magnitude of another something (SL 408/399/337). Again, Hegel has in mind how the temperature of something is altered by the temperature (heat) of another thing outside it.

However, there is more to this external determination than what first meets the eye. This is to say, a given thing “does not accept this externally imposed alteration as an arithmetical amount: its measure reacts against this amount and adopts it in a peculiar way” that is specific to it. In other words, “it alters the externally posited ... [quantum], and makes this quantum into a different one” than the one it receives (SL 408/399–400/337). To put this very simply and in layman’s terms, if the thing receives, say, 10 °C, its own temperature might increase by 8 °C. This indicates that the recipient something has a say in the matter, so to speak. This difference between what it absorbs and what it emits is due to the specific heat capacity each substance has.¹³

Thus “through this specifying, [it] manifests itself as being-for-itself [*Fürsichsein*] in this externality,” namely, in the quantum of temperature it emits. This latter is the “specified” or “*specifically absorbed* amount,” which is “itself a quantum” that depends “on the other,” namely, on the specific heat capacity, which he oddly calls “quantum” (SL 408–9/400/337). It should be noted in passim that the scenario described

here does not match what Hegel generally regards as *Fürsichsein*. What he seems to mean by this term in the present context is that the specific heat capacity (which he keeps conflating with a specific magnitude) *determines itself* to some extent.

Again, the result we obtain is a “specified amount,” which Hegel also calls “the determinate being [*Dasein*] of measure.” This determinate being is “a *ratio*,” which is further determined as “the *exponent* of this ratio.” To say this in the reverse order, the “exponent” is the “specified amount.” At this point, Hegel clearly places his focus on how the scientists measure this amount. In this ratio, “the quantum is in the first instance taken as an immediate magnitude; in the second instance, it is taken as another amount, which is found in the exponent of the ratio.” Thus, in the second instance, the immediate, specifying quantum “undergoes ... alteration,” for it becomes a different quantum (SL 409/400/337–8).

“The exponent ... can at first appear to be a fixed quantum, as a quotient of the ratio between the external [quantum] and the qualitatively determined [quantum].” However, as such, the exponent “would be nothing but an external quantum” According to Hegel, “we have already seen” that, rather than being merely an external amount, “the exponent here must be understood as nothing” other than the quantum specified by “the qualitative moment itself.” Again, this specifying moment of measure is the “immanent qualitative” aspect, which is the determination of “*power*” (capacity) of the something that determines itself as the external quantum. “It must be such a determination which constitutes the ratio, and which, as the intrinsic [qualitative] determination of the quantum, here confronts the quantum as externally constituted” (SL 409/400/338). After all, “the temperature is itself the temperature of the air or some other specific temperature” (SL 411/402/339).

The conclusion Hegel has just reached is that the quality of a thing specifies itself in the exponent. However, we have also seen that it does this through the influence of the “temperature” of another thing, which it receives and mediates. Thus, as we have known all along, the exponent of the ratio (measure) expresses the relation of two quantitatively determined qualities of two things. Hegel will formally announce this conclusion both in the ensuing “Remark” and in the next subsection.

REMARK

As anticipated, Hegel's preceding discussion is abstracted from a real, observational phenomenon, "*temperature*," which he now presents as an "example" of specifying measure. "Temperature," he says, "is a *quality* in which ... external [quantum] and specified quantum are distinguished ... [as] two sides" (SL 410/401/338). This is a confusing statement, for no such distinction is made in the measurement of temperature. This confusion stems from the fact that Hegel at times uses "temperature" interchangeably with "specific heat capacity."

"It is assumed," says Hegel, "that the alteration of the temperature [of the medium] proceeds [increases or decreases] uniformly on the scale of an arithmetical progression." As we have noted previously, "the various particular bodies absorb temperature differently" in the same medium. The reason for this variance is that the "immanent measure" (specific heat capacity) of each body is different, and so each converts the amount "received from outside" to a different magnitude of temperature. Consequently, the temperature of each body "does not correspond ... [either] with that of the medium" or with what is expressed in their "direct ratio" (SL 410/401/338–9). Thus our *observation* reveals that these bodies have something unique about them, which is their specific heat capacity (quality), though we cannot directly observe this capacity.

The heat capacity (C) is defined as the ratio of the amount of energy (Q) transferred to a "body" and the resultant change (Δ) in temperature (T): $C = Q/\Delta T$. In Hegel's words, "different bodies compared at one and the same temperature [of the medium] give the ratio-amount of their specific heats, of their thermal capacities." However, "the [heat] capacities of bodies vary in different temperatures." Thus, in each specific temperature variation, we get "a particular specification" of the specific capacity of each body. Consequently, the ratio of the specific heat capacity of a body "has no fixed exponent;" nor does "the increase or decrease of this heat [capacity] ... proceed uniformly with the increase or decrease of the external heat" (SL 410/401–2/339). As it turns out, the heat capacity is also indeterminate, since it fluctuates.

What Hegel explicitly complains about here is that each specific exponent is "understood" to be not only a "purely external" measure but also a measure that undergoes "purely quantitative ... change." However, Hegel reminds this understanding that the specific heat ("*spezifische Temperatur*") is the specific heat "of the air" and of another thing.

Indeed, adds Hegel, “if examined more closely,” the “ratio would have to be regarded not as the ratio of a merely quantitative quantum to a qualitative one, but as the ratio of two specific [qualitative] quanta.” Thus Hegel concludes that, “the specifying ratio is now determined further, in that the moments of measure are not simply the [quantitative] sides of one and the same quality, one of which qualifies the other quantum, but rather entails the relation [or ratio] of two qualities which are in themselves measures” (SL 410–1/402/339). Through this purely external consideration Hegel reaches a very obvious conclusion, which is that the quantitatively expressed specific heat of a thing actually expresses the relation of two qualities.

RELATION OF THE TWO SIDES AS QUALITIES

After repeating some of the already familiar issues, Hegel reproduces the conclusion he has just reached: “the differentiation of quantum into different qualities,” which belong to two “different bodies, gives a further form of measure in which the two sides are related to each other as qualitatively determined quanta.” This form of measure “can be called the *realized measure*” (SL 412/403/340). In the ratio of the realized measure, “the magnitudes are determined by the nature of the qualities, and so are posited as [the] different” magnitudes of these qualities (SL 421/411/347), as we have also seen earlier (SL 408/398/337, 410/401/339). “Measure is thus the *immanently* quantitative relation [*Verhalten*] of two qualities to each other” (SL 412/403/340).

Hegel’s task now is to provide a quick formulation, a reminder as it were, of the “higher,” “true,” logical-philosophical science of measures. Thus he asserts abruptly that “(1) the true alteration is that of the quantum as such; (2) when understood in this way, we have the interesting determination of the variable magnitude in higher mathematics.” The first claim simply boils down to the following reasoning: the “true alteration” must be understood in terms of the logical alteration or the simple determination of the concept of quantum, according to which “the *other of quantum [as such] is only quality [as such]*,” and vice versa (SL 412–3/404/340). This formula was introduced during the transition from quantity to quality, which ultimately gave us the category of measure.

Hegel courteously extends this speculative benefit to “real (*reellen*)” measure determinations: “The true determination ... of the real variable magnitude is that it is ... qualitatively determined.” What is

“*posited*” here is that “quantum as such is not valid [or true]” by itself. Rather, it is “determined in accordance with its other,” namely, quality (SL 413/404/340–1). On the one hand, (1) what Hegel says here is trivially and tautologically true: if we are considering the magnitudes of two qualities in a ratio, then it is true that the ratio has something to do with these qualities. On the other hand, (2) it should not be assumed that the quanta of a purely quantitative ratio are necessarily determined by real qualities. For instance, in considering the ratio of 8–4, I do not need to know that these quanta stand for apples and oranges.

At any rate, Hegel’s point seems to be that natural sciences merely presuppose the relation of qualities to the quanta that express them in a ratio. In the “Remark” attached to this subsection, he goes on to suggest that natural sciences would be much better off if they were to adopt his “higher proofs.” In its approach to “the absolute measure-ratios [or relations], the mathematics of nature, if it is to be worthy of the name of science, must be essentially the [Hegelian] science of measures.” Here, the Newtonian and Baconian “mathematical principles of natural philosophy” are summarily criticized for lacking the Hegelian speculative insight, namely, the insight obtained “from the standpoint of the concept.” Galileo (on the law of “the descent of falling bodies”) and Kepler (on the law of “the motion of the heavenly bodies”) are accorded a higher standing in the Hegelian scale of science than are Newton and Bacon. But, adds Hegel, “a still higher *proof* of these laws must be demanded.” The formula for this proof is supplied by none other than Hegel himself: “their quantitative determinations [must] be known from their qualities or specific concepts (such as time and space), which are related.” In other words, both the strictly “empirical” proofs and “proofs on a strictly mathematical basis” must be superseded by the proofs “from the concept” (SL 415–6/406–7/343–4).

Once again, the Hegelian proof is based on the formula that “the *other of quantum is only quality*,” and vice versa. Each category, then, is the other of the other. To recall, this proof involves “the *double transition*,” of which Hegel has spoken in the previous chapter. This “*double transition*” is “required for the totality to be *posited*.” Thus “the necessity of the *double transition* is of great importance for the entire scientific method” (SL 392/383–4/323).

As far as I can tell, the “higher” proof goes as follows: (1) the two quanta of a ratio are internally related; (2) since quality is the other of quantity, then it follows that these two quanta are necessarily determined

by two qualities; (3) since a quality is also necessarily determined by another quality, it follows that it is likewise internally related to the other quality. Consequently, (4) the quantitative ratio expresses precisely the logical relation of two qualities. With this “proof,” we reach being-for-itself in measure.

Hegel now wants to convince us that this scientific conception of measure is revealed more and more adequately in three motion related ratios. As it turns out, Hegel is unsatisfied with these ratios themselves. One such measure is the direct ratio (or relation) of space to time, the exponent of which gives us the velocity of a body ($v = s/t$). Hegel complains that this “direct ratio ... is reduced ... to the formal determination which has no existence except for the abstracting reflection.” In this context, Hegel complains that this ratio only posits the quantum of average velocity, which has no corresponding real existence. In the ensuing “Remark,” he problematizes this direct ratio in a different way. First, he describes “velocity as the direct ratio of space traversed and time elapsed.” In this ratio, the “denominator [unit]” represents “the magnitude of time,” and the “numerator [amount]” stands for the “magnitude of space.” “If velocity as such is only a [quantitative] ratio of ... space and time ..., [then] it is immaterial which of the two moments is to be considered as amount or as unit.” This interchangeability stems from the nature of the direct ratio (see Chap. 7). But, adds Hegel, “space is the external, real whole in general, and [is] thus amount, while time ... is the ideal, the negative, the side of unity.” Thus it is *not* “a matter of indifference which of the two moments [i.e., real qualities] is to be taken as the amount or as the unit.” The point of this futile exercise is that the quantitative ratio in question betrays the reality it represents, for it posits the relation of the two qualities as one of indifference—“as mutually indifferent qualities” (*SL* 414–5/405–6/342).

However, rather than devising a new ratio to solve this (non) problem, Hegel advances to other measure relations or ratios of motion, which he regards as more adequate conceptual representations of these qualities. Galileo’s formula for the falling bodies (“ $s = at^2$ ”) supercedes the direct ratio (velocity) in this regard; Kepler’s formula for the motion of celestial bodies (“ $s^3 = at^2$ ”) reflects “the higher realization of the qualifying of the quantitative,” which is “more harmonious with the concept.” In short, “these kinds of motion, as well as their laws, rest on the development of the concept of their moments, [namely,] space and time.” This is because space and time “as such,” that is, “in themselves,

are *inseparable* in their concept,” and their “quantitative ratio [or relation] is the being-for-itself of their measures” (SL 415/406/342).

Although incompletely and awkwardly stated, Hegel’s basic message here is clear enough: (1) according to their concept, space and time are *inseparable*; (2) this concept is more adequately represented in the motion of falling bodies and, especially, in the movement of celestial bodies, than it is in velocity; (3) the quantitative ratios (as given by Galileo and Kepler,) relatively adequately express the realization of this concept, in that, especially Kepler’s ratio of powers, coincides with their totality as being-for-itself. To recall, “being-for-itself” expresses the “*double* transition” of the two qualities, and so of their sublated self-relation and identity. In short, so it seems, and at least in this context, Hegel has deduced the further realization of the concept of space and time, as being-for-itself, from his conception of the ratio of powers. What we have now is the development of measure to the stage of “being-for-itself.” This development is to be further explicated in the next subsection.

BEING-FOR-ITSELF IN MEASURE

This subsection consists of three considerations. These considerations are meant to reiterate the development of the concept of measure to the stage of being-for-itself, as this development is exhibited in *Hegel’s* own movement through three kinds of motion and the three measure relations/ratios entailed therein. What we are about to encounter here is quite repetitive. In the interest of brevity, I will simply present a summary of these considerations until Hegel produces a new conclusion at the end of this subsection.

The first consideration begins by restating the result of the previous subsection: “In the form of specified measure just considered,” that is, in “the ratio of powers,” “the quantitative sides are qualitatively determined.” Thus “they are the moments of one measure-determinateness,” the “nature” of which is essentially qualitative. If so, “in this respect, the two qualities are posited only as immediate, [and so as] *only different*, which do not themselves stand in the same relationship as their quantitative determinatenesses.” This refers to the position of the understanding or the scientist. At this stage, “the qualitative element ... conceals itself, specifying not itself but the quantitative determinateness” in the ratio of powers. This further means that, since they are taken merely as immediate and different, that is, as unrelated and indifferent, the internal

relation of the two qualities (space and time) is also concealed, even though this relation is explicitly posited in their quantitative relation. Thus space appears to “exist by itself, apart from and without time, and time [appears to be] ... flowing independently of space.” The first consideration concludes by restating the conclusion stated at the beginning of this paragraph, and promises to both justify “this conclusion” and explain “its import ... in more detail” (SL 417–8/408–9/344–5).

We now arrive at the second consideration. However, instead of a justification, Hegel basically claims that the following conclusion “has already been demonstrated”—presumably in the previous subsection. The “demonstrated” conclusion is this: “the immediacy [i.e., the exponent], which is thus posited [in the ratio], is the negation of the qualitative determination of measure.” In other words, the qualities implicated in the quantitative measure are not the “independent qualities” they first “appeared” to be; rather, they are determined as the moments of the exponent, which is their negation. “As the negation of the distinct, qualitatively determined sides, this exponent is” the negation of the negation, and so is “a being-for-itself, the absolutely determined being [*das Schlechthin-bestimmtsein*].” However, and once again, this fact is concealed in the exponent. Consequently, the exponent is “being-for-itself only *in itself* [*an sich*],” and so only implicitly (SL 418/409/345).

After several considerations in which he berates “the concrete sciences” and their approach to these ratios, Hegel reminds us that, “here we only have to deal with the concept-determinateness, which is that, in the determination of measure, the empirical coefficient [of the ratio of powers] constitutes the moment of *being-for-itself*.” However, in this being-for-itself, “this moment is only *implicit*, and so is immediate.” “The *development* of this being-for-itself,” and hence the explication of the implicit moment in it, is exhibited in “the specific measure determinateness of the [qualitative] sides” (SL 420/409–10/345–6).

We now arrive at the third consideration. The result we have reached is that measure, “as the unity of its two sides, contains the relation in which the magnitudes are determined as posited by the nature of the qualities.” Consequently, measure is a “wholly immanent and self-subsistent,” self-determining being, which posits only itself in its quantitative, external relation. “At the same time,” these qualities have “collapsed into ... an immediate quantum [i.e., the exponent],” which is their “being-for-itself.” In short, the being-for-itself, as an immediate quantum, expresses “the self-determination” of the two qualities (SL 420–1/411/347).

Hegel's main point here is that the unity of qualitative moments, namely, the motion of a body, determines itself as a quantum, and so as its "other." "Conversely, the immediate measure," namely, the quantum as the exponent, "which ought to be [only] implicitly qualitative, has its truth in the qualitative determinateness." In short, and once again, what we have here is the aforementioned "*double* transition," since each side of the measure is determined as its other. This "negative unity" yields the "category" of "*real being-for-itself*" (SL 421/411/347).

In yet another abrupt move, Hegel now calls this *real being-for-itself* "the [developed] category of *something*," which is an entirely self-contained being, a "*complete self-subsistence*." This something is a "*real being-for-itself*," which is the unity of the two somethings or qualities that now appear to be its moments. Once they are determined as this totality, their measure relations fall within this totality. The upshot here is that, if Hegel is to be believed, the measure of something is now found exclusively within it, and as entirely identical with it. At this point, Hegel leaps to the conclusion that "such a self-subsistent whole," which is "a [concrete] being-for-itself [*Fürsichseiendes*], is at the same time a repulsion into [two] *distinct self-subsistent* somethings, whose qualitative nature and presence (materiality [*Materialität*]) lies in their measure determinateness" (SL 421/412/347).

Hegel has simply conjured up the "materiality" of the two somethings, which is not implied in the measure determinateness of space and time.¹⁴ Moreover, the conclusion he has now reached constitutes a dialectical retreat. In other words, the first issue Hegel will consider in the next chapter is the two materially determined measures (two material somethings in this sense) of one thing, namely, its weight and density. This consideration will lead to the conclusion that the measure of one thing is indeterminate or unstable, and so must be determined in relation to the measures of other things. This, as we have seen, was also the conclusion of the subsection called "Specifying Measure." Lastly, and relatedly, the transition to the next chapter appears to be entirely arbitrary.

NOTES

1. All quotations and citations from *EL* are from G.W.F. Hegel, *The Encyclopaedia Logic: Part I of the Encyclopaedia of Philosophical Sciences with the Zusätze*, trans. T. F. Geraets et al. (Indianapolis, IN: Hackett, 1991) (Hegel 1991).

2. The three page numbers included in the citation reference the following three texts: G. W. F. Hegel, *Wissenschaft der Logik. Erster Theil: Die Objektive Logik. Erste Abtheilung: Die Lehre Vom Seyn*, ed. Leopold Von Henning (Berlin: Duncker and Humblot, 1833) (Hegel 1833); G. W. Hegel, *Wissenschaft der Logik I. Erster Teil: Die Objektive Logik. Erstes Buch*, ed. Eva Moldenhauer und Karl M. Michel (Frankfurt am Main: Suhrkamp Verlag, 1969) (Hegel 1969b); *Hegel's Science of Logic*, trans. A. V. Miller (Amherst, NY: Humanity Books, 1969) (Hegel 1969a).
3. Michael Inwood, *Hegel* (Oxon, UK: Routledge, 1983), 298 (Inwood 1983).
4. Charles Taylor, *Hegel* (Cambridge, UK: Cambridge University Press, 1977), 252 (Taylor 1977).
5. In "Measure," says Findlay, "Hegel is mainly trying to incorporate and digest the findings of the sciences of his own time, many of which are irrelevant to his purpose." Findlay, *Hegel: A Re-examination* (New York, NY: Collier Books, 1958), 178 (Findlay 1958).
6. Hegel, *Philosophy of Nature*, 39. This attempt often turns into a "perverse polemic against sound scientific insights." Errol E. Harris, *An Interpretation of the Logic of Hegel* (Lanham, MD: University Press of America, 1983), 143 (Harris 1983).
7. Similarly, he complains elsewhere that "applied mathematics is, on the whole, not an immanent science, simply because it is the application of pure mathematics to a given material and to its empirically derived determinations." G. W. Hegel, *Philosophy of Nature, Being Part Two of the Encyclopaedia of the Philosophical Sciences*, trans. A. V. Miller (Oxford, UK: Oxford University Press, 1970), 40 (Hegel 1970).
8. In a confusing manner, Hegel uses these terms interchangeably throughout "Measure."
9. All quotations and citations from *EL* are from G. W. F. Hegel, *The Encyclopaedia Logic: Part I of the Encyclopaedia of Philosophical Sciences with the Zusätze*, trans. T. F. Geraets et al. (Indianapolis, IN: Hackett, 1991) (Hegel 1991).
10. At this point, Hegel considers another type of measure, namely, "the rule" or "a standard." He repeats this consideration in the next section.
11. He gives a more accurate representation of these *elenchi* elsewhere. See G.W.F. Hegel, *Lectures on the History of Philosophy*, Vol. 1, trans. Elizabeth S. Haldane (London: Kegan Paul, 1894), 463 (Hegel 1894).
12. John McTaggart, *A Commentary on Hegel's Logic* (Cambridge, UK: Cambridge University Press, 1910), 76–77 (McTaggart 1910).
13. Basically, the specific heat of a substance refers to the amount of heat (energy) required to change the temperature of one unit of its mass (e.g., 1 g) by

1 °C. For instance water has a high heat capacity; 1 g of water has to absorb approximately 4.18 J (1 cal) of heat to increase by 1 °C. By contrast, even ice and steam, which are closely related to water, require almost one half of such thermal units (Joules) to increase their temperature in the same amount. Mercury, which is the substance commonly used to measure the temperature of things, requires 0.14 J to go up by 1 °C.

14. As it is well known, Hegel attempts to justify this transition from space and time to matter in his *Philosophy of Nature*. For a brief but useful analysis of how he does this, see Richard D. Winfield, "Space, Time and Matter: Conceiving Nature without Foundations," in *Hegel and the Philosophy of Nature*, ed. Stephen Houlgate, 51–69 (Albany, NY: SUNY Press, 1998), 61–66 (Winfield 1998). Also see Edward Halper, "The Logic of Hegel's Philosophy of Nature," in *Hegel and the Philosophy of Nature*, ed. Stephen Houlgate, 29–49 (Albany, NY: SUNY Press, 1998) (Halper 1998), 42–43. In my view, the said transition is entirely unconvincing.

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Real Measure

This chapter is divided into three sections: “The Relation of Self-subsistent Measures,” “Nodal Line of Measure Relations,” and “The Measureless.” Hegel first reaches the conclusion that the measure of a material thing is indeterminate. This requires us to consider the measure relations of multiple substances. This consideration produces a series of measures in which he discovers the nodal line of measure relations. In the second section of this chapter, Hegel repeats the notion that the quality of a substrate depends on a specific quantum, which is limited by nodal points. Due to its quantitative nature, this quantum necessarily repels itself beyond itself, and thus becomes the measure of another quality of the same substrate, *ad infinitum*. The purely quantitative aspect of the infinite process is called “measureless.” However, in the last section of this chapter, Hegel mainly considers the relationship of the substrate to its qualities, which are reduced to “states.” The main conclusion Hegel draws from this scenario is that the substrate is not the self-determining, free concept, for it is determined externally by its states to some extent.

THE RELATION OF SELF-SUBSISTENT MEASURES

In Hegel’s words, the conclusion of the previous chapter is the following: “Measure is [now] the relation of measures, which constitute the quality of distinct self-subsistent ... *things*.” In other words, “the relations of measure just considered ... [are the relations of] abstract qualities like space and time; the ... [qualities] about to be considered are

specific gravity, and later on, chemical properties, which are examples of the determinations [qualities or measures] of *material* existence" (SL 421/412/348).¹ Thus we have moved from "immediate" measures to "self-subsistent" measures, "because" measures "have become relations of specified measures in themselves." This ambiguous statement basically refers to the fact that measure has now become the specific quality or property of a material thing, the materiality of which is also its quality. Each specific quality is, in itself, an immediate measure, since it also has a specific quantitative side to its materiality. Accordingly, measures are now "physical somethings, in the first instance, material things" (SL 423/413/349).

This section explicates the relations of such real measures in three subsections: "Combination of Two Measures," "Measure as a Series of Measure Relations," and "Elective Affinity." In my view, these subsections can be skipped without taking away anything from the "logical" progression of the category of measure. For this reason, I will consider only the first subsection in some detail, and then offer several transitional observations on the other two.

RELATION OF TWO MEASURES

Ultimately, this subsection considers the relation of two "measures" found in one measure of a thing, namely, its density, though Hegel confusingly refers to density also as "specific gravity." The most basic aim here is to deem the density (especially its spatial aspect) of a material thing unstable.

First, Hegel identifies the basic characteristics of material things. In the first place, a "something" of this kind is "immanently determined as a measure relation of quanta," which are also "qualities." In other words, a given physical thing "is the relation of these [quantitative] qualities." One of these qualities "is the *being-within-itself* [*Insichsein*] of the something, by virtue of which it is a [a material] real being-for-itself." This materiality or quality is quantifiable in two distinctive ways: it is (1) "intensively ... weight" and (2) extensively "the multiplicity of *material* parts." The second basic quality of a material thing is "the *externality*" of (1) and (2) together. This externality is "space," which is determined as the *volume* of a thing in relation to the three-dimensional material parts (SL 423-4/414/349).

Hegel reasons next that these two “qualities are quantitatively determined, and their relation constitutes the qualitative nature of the material something.” In this context, “specific gravity” is picked as each thing’s “qualitative nature.” First, Hegel incorrectly defines specific gravity as “the ratio of weight to volume.” What emerges here, once again, is “a direct ratio,” which has “ordinary” quanta for its sides. In other words, the density of something is given as the ratio of its weight (or mass) to its volume, each of which is represented by a quantum. These quanta are further “determined as the ordinary exponent of a direct ratio,” namely, as another ordinary quantum. This exponent is a quantitative determination of “the specific [qualitative] nature of such something,” namely, its specific gravity. However, adds Hegel more correctly, it is so “only in the [quantitative] *comparison* with other exponents of such ratios” (*SL* 424/414–5/349–50). The “comparison” of two ratios Hegel has in mind is actually how the specific gravity of a substance is obtained.

In this comparison, “two things with distinct inner measures are ... connected”—for instance, in the comparison of “two metals with distinct specific gravities.” However, what is really at stake here for Hegel is the indeterminacy of the density of a thing, especially its spatial aspect. He discovers this indeterminacy by appealing to a purely observational consideration: the combination of two material substances. When we add their “magnitudes,” namely, their weights and volumes, we ordinarily expect that the added weights and volumes “would remain equal to their sum.” However, “this is true only of the [sum of the] weight of the mixture,” but not of the sum of its volume (*SL* 425/415–6/350–1). For instance, the sum of a cup of water and a cup of sugar does not equal to two cups. The reason for this is that some of the molecules of the dissolved sugar fill the gaps between the molecules of water.

From the point of view of “sense-perception,” Hegel adds boastfully, “it may appear striking that the mixing of two ... distinct material substances should be followed by an alteration—usually a diminution—in the sum of the two volumes.” What remains a stable measurement are the “material parts,” which are quantitatively represented by their weight (*SL* 426/416/351).

Ultimately, Hegel’s argument here is the following. First, “one of the qualitative sides [i.e., volume] is ... posited as [quantitatively] alterable.” Second, because the measure of that something contains this alterable quantitative quality, it too is intrinsically alterable. Therefore, its measure

is “intrinsically unstable.” Consequently, what is supposed to be “the [unalterable] qualitative nature of the something” proves to be unstable. We thus reach the conclusion that its qualitative nature “has its determinateness in other measure relations” (*SL* 426/416/351). Accordingly, in “Measure as a Series of Measures” and “Elective Affinity,” Hegel considers the series of stoichiometric reactions of chemicals, and even musical notes. Obviously, this is not a logically necessary transition.

In the interest of brevity, I will only draw several conclusions from these brief and problematic subsections.² The consideration of the aforementioned measure relations leads Hegel to admit that, in these considerations, “no further principle of specification has offered itself” for the self-subsistent things and their relations. Simply put, the stoichiometric considerations, which highlight the presence of a spurious series of measures, leads to the conclusion that a self-subsistent thing is “afflicted with its own indifference; it is in its own self something external and alterable in its self-relation.” In this alternation, in which the series of measures exhibit “only quantitative distinctions,” we discover “a *nodal line* on a scale of more or less” (*SL* 445–7/436–7/366–7).

This transition to the *nodal line* involves at least two dialectical problems, which I will state only very briefly.³ First, the conclusion Hegel has just reached, that a substance is “afflicted with its own indifference,” will be reproduced again subsequently. In fact, this is the final lesson Hegel will draw from this chapter. Second, the determination we now have was introduced in the first section of the first chapter of “Measure.” Thus, Hegel will reach the same conclusion by considering a category he has introduced earlier. As I have mentioned previously, I think these confusing advances and retreats have much to do with Hegel’s attempt to improve the equally problematic arrangement of the first edition of *SL*.

NODAL LINE OF MEASURE-RELATIONS

Once again, a self-subsistent material thing has “a permanent, material substrate.” However, the measure of this substrate must also contain, “*within* itself, the principle of the specification of ... externality,” namely, quantitative alterability. Thus, “because it is at the same time essentially a relation of quanta, such a being-for-itself is open to ... alteration.” Hegel’s point, once again, is that such a being (1) “has a range within which it remains indifferent to this alteration,” which means that “its quality does not change” within that range. However, (2) “there is a point in this

quantitative alteration at which the quality is changed and the quantum proves to be specifying, so that the altered quantitative relation is transformed into a [new specific] measure, and thus into a new quality, a new something [or a new state of existence]" (SL 446–7/436–7/367).

However, maintains Hegel, "the new quality or the new something is subject to the same progressive alteration, and so forth to infinity." This infinity is none other than the infinite progression of one finite quality (or state) after another. This discontinuity or discreteness of the series of qualities is marked by "a steady continuity of quantity." "From this [strictly quantitative] side, the change is a *gradual* one." However, this is not true of the "qualitative aspect," since the alteration of one quality into another is "a *leap* [*ein Sprung*]." Consequently, two (or many) measures "are posited as completely external to each other" (SL 447–8/437–8/368).

Hegel's leap theory of qualitative alternation might be considered a response to Leibniz, or his subsequent followers, who upheld the maxim of "*Natura non facit saltum*."⁴ Hegel proceeds to controvert this view, which is "happy" to comprehend qualitative change as the "gradualness of the transition." "On the contrary," objects Hegel, the "gradualness is merely the indifferent alteration" of quantum, and so is "the opposite of [a] qualitative [alternation]." The idea here is that the alternation of one quality into another requires both qualities to be related as each other's other or limit. Since Hegel readily assumes that gradual change is purely quantitative, and since quantity as such does not have any qualitative limit, then he reasons that gradual change cannot explain qualitative change, even though he repeatedly claims that quantitative change is responsible for qualitative change.

Ultimately, Hegel proves here that the Hegelian logical comprehension of natural change cannot explain such change. Consequently, he plunges into the cryptically expressed and unscientific claim that qualitative change in nature occurs through leaps. In the ensuing "Remark: Examples of Such Nodal Lines; the Maxim, 'Nature Does Not Make Leaps,'" Hegel provides several examples to illustrate the validity of the leap theory (SL 448–52/438–42/368–71). Some of what he has to say here is painful to read. In short, the leap theory, which is intimately related to Hegel's well-known denial of evolution,⁵ is unscientific, and thus should not be taken seriously.

At any rate, Hegel's point is that "qualitative change" must be grasped logically, that is, through "a [conceptual] comprehension [*Begreifen*]"

(*SL* 448/438/368), which alone can demonstrate “the continuity of the concept with itself.”⁶ However, what we have presently is the infinite repetition in which qualities “are posited as completely external to each other,” and this determination somehow gives us the category of “the measureless.”

THE MEASURELESS

This section is barely about the category of measureless, which is quickly described and then abandoned. Indeed, Hegel does not seem to have a central aim in this section—at least I cannot discern one.

As we have seen, “the exclusive measure ... remains afflicted with the moment of quantitative determinate being.” For this reason, it is “capable [*fähig*] of ascending and descending on the quantitative scale of changing ratios [or measures].” Consequently, “something, or a quality, based on such a [quantitatively determined] ratio ..., perishes by the mere alteration of its magnitude” or specific quantum (*SL* 452/442/371).

At this point, Hegel abruptly introduces the category of measureless: “The abstract measureless is the quantum in general, which lacks determination [or qualitative limit] within itself.” Therefore, “only as an indifferent determinateness ..., [quantum] cannot alter the measure” (*SL* 452/442/371). Although he does not explicitly say so, I believe Hegel’s intention here is to highlight a contradiction. On the one hand, the measure of something is “destroyed” merely by the alteration of its specific quantum. On the other hand, “quantum in general ... cannot alter the measure.” Hegel does not either acknowledge or resolve this contradiction.

Hegel now proceeds to describe this contradiction in a different way. As we have just seen, the abstract measureless, which is another word for the abstract, quantitative aspect of measure, is merely “an indifferent determinateness.” As such, it cannot specify the measure of something. However, “in the nodal line of measures,” it “is at the same time posited as specifying.” Consequently, “the abstract measureless elevates itself to a qualitative determinateness.” With this specification, there arises a new measure and a new quality. Since this transition is a qualitative leap, the relationship between the previous measure and the new measure is merely the quantitative, abstract measureless. Thus the infinite “alternation of specific existences [or qualities] with one another”

is simultaneously “posited” as “their merely quantitative relations” or alterations. However, the latter transition is the *denial* of the former, though Hegel refers to it as “negation.” Therefore, “what is present in this transition” is a double negation, “the negation of the specific [qualitative] relations and the negation of the quantitative progress itself” (SL 452/442/371).

Hegel readily announces that this double negation “is the *infinite* being-for-itself [*fürsichseiende*]” (SL 452/442/371). This statement implies that measure sublates itself, and returns to itself, in the aforementioned infinite alteration and alternation. As far as I can tell, Hegel never reconciles the contradiction, or the inconsistency, between the qualitative and quantitative transitions of measure. Instead, he simply repeats what happens in this process without mentioning the problem. In *EL*, we find the following description:

What actually happens here is that the *immediacy*, which still belongs to measure as such, is sublated; quality and quantity themselves are initially in measure as *immediate*, and measure is only their *relational identity*. But although measure sublates itself in the measureless, it shows itself equally to be only going together *with itself* in the measureless, which is [both] its negation [and identity, for the measureless] ... is itself a unity of quantity and quality [and so is itself immediately a measure]. (*EL* 172-3)⁷

In *EL*, Hegel deduces essence directly and rapidly from this consideration. In *SL*, however, the transition takes a longer and tortured path. In the first place, after giving us a very similar description of “what actually happens,” he concludes that measure “continues itself into itself [and unites itself with itself] in its alternating measures,” and thus sublates itself in so doing. He then abruptly concludes that “this unity, which continues itself into itself in its alternating measures, is the truly permanent, self-subsistent matter—thing [*Sache*],” which he also calls “the substrate” (SL 453/443/371–2). This is an acceptable conclusion, though it is simply presupposed—or has been presupposed all along.

Thus “what is present here,” Hegel now claims, is a process in which “one and the same thing ... is posited as the perennial ground of its [own infinite qualitative and quantitative] differentiations.” This claim is deduced from the initial assumption that the substrate is essentially measure, and so is “in itself already the unity of its qualitative and quantitative moments.” As we have seen, the immediate measure of the substrate

necessarily repels itself from itself infinitely. According to Hegel, this indicates that the “substrate immediately contains in its own self the determination” of the infinite measures, for these issue from it. This oddly means that the substrate is logically the same as its measures or qualities (*SL* 453/443/372).

This “self-sameness of the substrate” is (ambivalently) further proven (“*posited*”) by the fact that the “qualitative self-subsistent measures,” into which its immediate measure “is repelled, consists of only quantitative distinctions, so that the substrate maintains itself in its own self-differentiation” (*SL* 453–4/443/372). This is a confusing statement, which implies that the substrate does not differentiate itself qualitatively. The confusion stems from the fact that Hegel switches back and forth between different meanings he rather randomly attributes to both qualitative and quantitative determination and distinction.

What he ultimately means to say is that the substrate is “indifferent” to its qualities; it remains the self-same substrate throughout the whole process of its self-differentiation (he will revise this claim shortly). In fact, Hegel is trying to convey a simple message here: a permanent “substrate” necessarily underlies “the process” in which we find distinct measures and the qualities they specify, and so is “the basis of their unity.” This further means that these measures, and the qualities they specify, are not indifferent to the substrate on which their being ultimately depends. Consequently, they are demoted to the status of “states,” for they can no longer be posited as “self-subsistent things.” The unimpressive conclusion we now reach is that “the alteration is only” a process in which the substrate (the subject) alters its “*state*” of existence, but “the *subject* of transition” remains the “*same* in the process” (*SL* 454/443/372–3).

Hegel now proceeds to “summarize” the “progressive determinations measure has passed through.” First, measure is the immediate unity of quality and quantity, which is expressed as a “specific quantity” or a “ratio.” This ultimately “yields a number of measure relations,” which appear to be “self-subsistent” in themselves. However, “this unity” of related measures is “merely an *arrangement*,” and so still exhibits externality. By this, he means to say that these measures are still the external determinations of the substrate. However, in this “summary” of how we have arrived here, Hegel suddenly introduces a new conclusion. The unity or “principle,” which specifies its differences, is “only a substrate, a matter,” and so is “not yet the free concept, which alone ... [is capable of giving] its differences an immanent determination.” In other words, “the nature

of the unchanged substrate ... depends solely on the external quantitative determination that shows itself also as a distinction of quality.” In short, the inner nature or quality of the substrate is only “an external state” (SL 454–5/444–5/373–4).

The hidden conclusion of these rather incoherent claims is two-fold: (1) the substrate is indifferent to its states, which constitute its inner quality; and (2) this indifference is not absolute, for the substrate is externally determined by these states. This conclusion is indirectly revealed to us by the title (“The Absolute Indifference”) and the subject matter of the first section of the next chapter; it is not immanently or logically produced.

NOTES

1. The three page numbers included in the citation reference the following three texts: G.W.F. Hegel, *Wissenschaft der Logik. Erster Theil: Die Objektive Logik. Erste Abtheilung: Die Lehre Vom Seyn*, ed. Leopold Von Henning (Berlin: Duncker and Humblot, 1833) (Hegel 1833); G.W. Hegel, *Wissenschaft der Logik I. Erster Teil: Die Objektive Logik. Erstes Buch*, ed. Eva Moldenhauer und Karl M. Michel (Frankfurt am Main: Suhrkamp Verlag, 1969) (Hegel 1969b); *Hegel's Science of Logic*, trans. A.V. Miller (Amherst, NY: Humanity Books, 1969) (Hegel 1969a).
2. For a detailed and justifiably critical assessment of these sections, see Ulrich Ruschig, “Logic and Chemistry in Hegel’s Philosophy,” *HYLE-International Journal for Philosophy of Chemistry* 7, no. 1 (2001): 5–22 (Ulrich 2001). Ruschig’s piece can also be read as a critique of John Burbidge’s *Real Process: How Logic and Chemistry Combine in Hegel’s Philosophy of Nature* (Toronto: University of Toronto Press, 1996) (John 1996). Ruschig, in my view plausibly, points out that what Hegel purports to be “merely the thought of materiality” necessarily depends on empirical, material facts and processes. Ruschig, “Logic and Chemistry in Hegel’s Philosophy,” 10–11. According to Carlson, Ruschig ignores the fact that “we now have merely the thought of materiality to which the thought of Measure is applied.” Thus Ruschig fails to see that “Hegel is aiming for the metaphysics of Measure,” for which certain specific measures, such as “density and stoichiometry,” are “but examples.” David G. Carlson, *A Commentary to Hegel’s Science of Logic* (New York, NY: Palgrave, 2007), 227, n. 10 (David 2007). What Carlson does not, indeed cannot, demonstrate is how Hegel builds his “metaphysics of Measure” without relying exclusively upon these observational examples.

3. For a sound critique of this transition, see McTaggart, *A Commentary on Hegel's Logic* (Cambridge, UK: Cambridge University Press, 1910), 83–85 (John 1910).
4. According to Leibniz, “nothing takes place all at once.” Indeed, he went so far as to maintain that “it is one of my most important and best verified maxims that *nature makes no leaps*.” Gottfried Wilhelm Leibniz, “Preface” to *New Essays on the Human Understanding*, in *Leibniz: Philosophical Writings*, ed. George H.R. Parkinson, 148–171 (London: Everyman, 1973), 158 (Leibniz 1973).
5. This denial is excused by those sympathetic to him as a “scientific restraint,” since the theory of evolution was not adequately proven during his life. For such a defense, see Errol E. Harris, “How Final is Hegel’s Rejection of Evolution,” in *Hegel and the Philosophy of Nature*, ed. Stephen Houlgate, 189–208 (Albany, NY: SUNY Press, 1998) (Harris 1998).
6. Hegel, *Philosophy of Nature, Being Part Two of the Encyclopaedia of the Philosophical Sciences*, trans. Ardold V. Miller (Oxford, UK: Oxford University Press, 1970), 22 (Hegel 1970).
7. All quotations and citations from *EL* are from G.W.F. Hegel, *The Encyclopaedia Logic: Part I of the Encyclopaedia of Philosophical Sciences with the Zusätze*, trans. T.F. Geraets et al. (Indianapolis, IN: Hackett, 1991) (Hegel 1991).

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The Becoming of Essence

This is a very brief chapter. Its three sections are: “The Absolute Indifference,” “Indifference as Inverse Relation of Its Factors,” and “Transition into Essence.” In the first section of this chapter, Hegel sublates the indifferent relation of the substrate to its states, and thus arrives at a new conception of being-for-itself. In the second section, he uses a specific example to illustrate why this is so. The consideration of this example suddenly suggests to Hegel that the specific qualities of the substrate are engulfed in an all-round contradiction, which ultimately resolves itself into a condition in which both the substrate and the category of indifference vanish. What remains is a negative unity in which the vanishing moments of being are merely, but necessarily, related. The third section reiterates this point, and argues that “relativity” is the determination we find in the sphere of essence. This transition into the sphere of essence concludes “The Doctrine of Being.”

THE ABSOLUTE INDIFFERENCE

This section consists of two dense paragraphs. The first paragraph describes three different senses of indifference. The first sense is attributed to pure being, which “is the abstract indifference [*Gleichgültigkeit*].” Since it “is to be thought by itself as [only] being, the expression ‘indifference’ [*Indifferenz*] has been used.” This is because “there is no form of determinateness” in pure being, and so no form of distinction. Thus *Gleichgültigkeit* is replaced with *Indifferenz*. The second determination

of *indifference* (*Indifferenz*) can be observed in “pure quantity,” which is “indifference” in the sense that it is “capable of all determinations, provided that these are external to [or are excluded from] it.” The third sense of indifference (*Indifferenz*) “can be called absolute,” for it is the result of a total “process of *self-mediation*,” of “*the negation* of all ... [categories] found in the sphere of being,” namely, “quality, quantity, and ... measure.” As a result, being “mediates *itself with itself* to form a simple unity” (SL 456/445–6/375).¹ Thus “*absolute indifference*” refers to the mediated absence (or vanishedness) of distinction and otherness, which is yet another “simple unity,” though one that presumably stands for the entire sphere of being. The absolute (total) indifference is thus the final determination found in the sphere of being.

The foregoing is simply a definition of the absolute indifference. The substrate-state relation does not attain to the absolute indifference. Accordingly, Hegel goes on to repeat that, with the substrate, “determinateness ... is only a state, that is, a *qualitative externality*” (SL 456/446/375). To say this differently and succinctly, *substrate* and *state* are distinct qualities, and the former determines itself externally as this other quality. This further means that it is not an adequate manifestation of the absolute indifference.

Hegel goes on to add that “what has thus been determined as qualitative and external is only a vanishing” determination. This is so because the quality *of* a being cannot be external to it. In other words, “quality [posited] as external to being is the opposite of itself; as such, it is only the sublation [abolition or vanishing] of itself.” “In this way,” or due this vanishing, “the determinateness is posited in the substrate only as an empty differentiation.” Hegel’s task now is to make this empty differentiation count as the internal determinateness of the substrate. This is done in the following sentence, which involves a trick: “the result of this empty differentiation is precisely the indifference itself.” In other words, Hegel here equates *empty differentiation* (*leere Unterscheiden*) with *indifference* (*Indifferenz*), which now means *lack* of real difference. Thus we now suppose that the substrate is indifference in itself. However, we have also said earlier that the external qualities (states) are collectively the indifference of the substrate. Given the tricky conclusion just drawn, we now take these states (indifference) to be identical with the indifference posited as the in-itself of the substrate. Consequently, the indifference, which the substrate now *is*, “is ... the concrete, which is in itself mediated through the negation of all determinations of being. As this

mediation, it contains negation and relation, and what was called ‘state’ is [now] its immanent, self-related distinction.” Consequently, the substrate “ceases to be merely a substrate and only abstract *in its own self*” (SL 456/446/375). “We now have to see how this determination of indifference is posited ... as being for itself” (SL 457/446/375). In this positing, we will rediscover the absolute indifference, which will abolish itself immanently.

INDIFFERENCE AS INVERSE RATIO OF ITS FACTORS

What we find in this section is a paradigmatic example in which “indifference as inverse ratio of its factors” refers to the centripetal and centrifugal forces entailed in the motion of celestial bodies in an elliptical orbit. Again, the aim is to posit indifference as being-for-itself. On the one hand, this appeal to a special case raises serious doubts about the universal applicability of the conclusions Hegel is about to reach. On the other hand, the reasoning he utilizes in this section is not only unscientific but also smacks of sophistry, which then raises grave doubts about its applicability to anything at all.

Hegel divides this section into three stages, which are numerically demarcated as such. The first stage is a summary of the ideas presented in the latter portion of “Measureless.” This suggests that this section might have been initially meant to immediately follow that section. At any rate, “the reduction of [or abstraction from] what was first thought to be independent measure relations,” as we have seen, “establishes their *one substrate*.” The substrate “is their continuity into one another, and so is the indivisible self-subsistence, which is *completely* present in its [own] distinctions” or states. However, the aforementioned *reduction* determines the substrate merely as “a result,” and so only as an “abstract [*an sich*] mediation,” that is, “not yet as posited.” Consequently otherness or externality still persists in it: “it is first substrate and, with respect to determinateness, [external] *indifference*.” Thus Hegel repeats that “the distinction in it,” or in relation to it, is “essentially the quantitative external” distinction (SL 457/446–7/375–6).

All this is a repetition of what we have covered previously. Now that we have restated the determination or distinction of the substrate to be “essentially quantitative [and] external,” we reintroduce the idea that this externality consists of quanta. However, Hegel leaps to the conclusion that “there are two different quanta,” and “*their sum*” is “itself

posited as a quantum” (SL 457/447/376). Obviously, this assertion is informed by the aforementioned special case Hegel has in mind in this section. In other words, these “quanta” are the “factors” indicated in the title of this section, which are the quantitatively determined centripetal and centrifugal forces. I suspect, furthermore, that Hegel takes “force” to be the substrate in question.

Now the “indifference” of the substrate, namely, its quantitative determination, is taken as a “fixed measure—the absolute limit existing in itself.” Given the presupposition that there are only two quanta and their sum is fixed, it follows that the combination of the two quanta must be equal to this fixed sum. We assume further that “the two quanta ... are variable, indifferent, greater or smaller in relation to each other.” This simply means that the two factors may vary in a ratio or relation, but cannot individually or collectively exceed the fixed sum. In this way, they are “contained ... by the fixed limit of their sum.” Given that the sum is fixed, when one of the two quantitative factors changes so must the other, but “*inversely*.” If one factor increases, the other must decrease proportionally; the loss of one factor is necessarily the gain of the other (SL 457/447/376).

“According to the stated qualitative determinateness, the distinction is present as [the distinction of] ... *two qualities*” (SL 458/447/376). This conclusion does not immanently follow. In other words, one cannot derive two specific qualities from a quantitative inverse ratio—even if one loosely calls the said negative relation of its factors “qualitative” on account of being negatively related as more and less. However, as mentioned already, Hegel is already presupposing that the ratio in question is the ratio of two qualities, namely centripetal and centrifugal forces.

Hegel goes on to reason that, (1) since these two qualities are “held in one unity ..., [2] each is inseparable from the other” (SL 458/447/376). Obviously, (2) does not necessarily follow from (1), for it is not necessarily true that two qualities held in a unity are inseparable. Once again, (2) depends on the special case Hegel has in mind. As we will see, he thinks that centripetal and centrifugal forces are inseparable, and so (1) must exist together in a unity, or (2) must be conceived as belonging together logically (these two options are used interchangeably).

Hegel adds assertively that, “as the indifference, the substrate itself is likewise the unity of both qualities” (SL 458/447/376). We should note that Hegel’s science here is inaccurate, for he assumes that centrifugal

force is an actual force (or resistance), rather than inertia, and both forces are inherently present in unity in the body or matter in motion.² In short, and to repeat, the substrate is “*in itself* the unity of both qualities [emphasis added],” which quantitatively add up to a fixed quantum.

Hegel leaps from this claim to the conclusion that “each of the [two] sides of the relation ... likewise contains both sides within itself, and is distinguished from the other side only by a more of one quality and a less of the other, and vice versa.” Thus, “through its quantum, one quality is *predominant* only in one side, and the other [quality is *predominant*] in the other [side].” Again, this claim depends on the specific example just mentioned. For instance, during its elliptical motion around the Sun, the Earth moves at varying speeds. This variation depends on whether it is approaching the perihelion (increase of velocity) or aphelion (decrease of velocity). These are the “two sides” Hegel currently has in mind. Thus we have two qualities (centripetal [CP] and centrifugal [CF] forces), which quantitatively struggle against each other in the two sides of the elliptical orbit. The quantitative relation of the two qualities on each side is this: $CP > CF$ and $CP < CF$. Therefore, each quality “relates itself to itself in the other, and so is present in each of the two sides, only in a different quantum [as more or less]” (SL 458/447–8/377).

According to Hegel, when we consider each quality as a whole, as in both sides together, what we find present is the identity (or unity) of identity and difference in it. However, instead of “identity,” he uses that much-abused expression, “indifference” (*Indifferenz*), which is explained by the fact that each quality is quantitatively *continuous* with itself in both sides. In his words, “their quantitative distinction is that indifference, according to which they are continuous, and this continuation is the self-sameness of the qualities in each of the two unities.” Moreover, “the [two] sides, each as a whole of determinations ..., are also posited against each other as self-sufficient [sides].” Presumably, Hegel has now explicated the development of the category of *indifference* within measure: “In the manner it just developed, being, as this indifference, is no longer in its immediacy” (SL 458/448/377). It has become concrete.

The last comment establishes the first main point of this section, and this brings us to its second point. Here, Hegel’s aim is to find three related deficiencies in the foregoing determination of the substrate. Simply stated, the first “defect” is that “the difference between ... [the two qualities] is posited ... as ... only *quantitative* [read

external], but not as the self-repulsion of the indifference,” namely, the substrate-substance. Hegel, thus complains here that their *distinction* is not posited as the self-determination of the substrate itself; instead, it is posited as “only an *external*” determination (presumably by the scientists). Therefore, the said distinction “is posited as immediate, and not as the self-mediation ... of the *absolute* as indifference” in and through its external moments or states (SL 459/448–9/377). In short, this view of the scientist is defective because it does not treat the substrate as the immanently dialectical subject (as the “free concept”), which repels its external determinations or distinction from *within* and *as* itself.

The second defect is essentially the same as the first. As we have seen, “both moments are in an inverse quantitative relation—a back-and-forth [or fluctuation] in the [total] magnitude.” This quantitative fluctuation, Hegel says, is not “determined ... by the indifference [*die Indifferenz*], which is precisely the indifference [*die Gleichgültigkeit*] of this fluctuation.” Thus the quantitative fluctuation-distinction is determined merely “externally” as independent indifference (*Gleichgültigkeit*), in the sense that this distinction is not posited as the immanent self-determination of the substrate (*Indifferenz*), even though the substrate is supposed to be their immanent unity. In short, the second defect, like the first defect, is that the quantitative “distinction is not determined by the *absolute*” (SL 459/449/377–8).

We are now to consider the third defect, which is a contradiction that is implied in the second defect. As indicated previously, “the quantitative determinateness of the moments,” namely, the two qualities that are quantitatively determined in the two sides (i.e., the perihelion and the aphelion), is the “mode” or state in which they subsist. Yet, the quantitative determinateness or relation of the two factors is disconnected from the qualitative moments of the substrate. This again implies that the relation of the quantitative to the qualitative aspect is one of indifference (*Gleichgültigkeit*), even though the quantitative is supposed to be determined by, or belong to, the qualitative aspect. “Here, the determinations come into immediate opposition, which [opposition] develops into a contradiction, as we are now to see” (SL 459–60/449/378).

The anticipated contradiction is framed in the following way. “*Within* each side, each quality enters into a [quantitative] relation with the other [quality], so that, as has been determined, the relation is only a quantitative distinction” (as *more* and *less*). By “only a quantitative distinction,” Hegel means *external*, separated, independent

distinction, namely, indifference (*Gleichgültigkeit*). However, the two qualities, together, are “at the same time determined” as belonging to “a single unity, as inseparable,” in the sense that “each has meaning and reality only in this one qualitative relation to the other” (SL 460/449–50/378).

“But now,” continues Hegel, “*because their quantitateness is simply of this qualitative nature, each [quality] reaches only as far as the other.*” The catch here is that, since the two qualities (or forces) are mutually dependent on their meaning and reality, they must be quantitatively coextensive, for one cannot conceive any portion or magnitude of one quality apart from the other. In other words, if the qualities “were [assumed] to be different quanta, then the one would go beyond the other.” Consequently, it “would have in its *more* [i.e., in the surplus beyond] an indifferent [*gleichgültiges*] determinate being [or existence], which the other would not have.” In this scenario, one quality (force) would quantitatively exceed the other quality (force). However, and to repeat, “in their qualitative relationship [*Beziehung*], each is only in so far as the other is. From this, it follows that they are in *equilibrium*, that the one increases or decreases just as much as the other increased or decreases—and [it would] increase or decrease at the same ratio.” “Therefore,” concludes Hegel, “on the basis of their *qualitative* relation, there cannot be any *quantitative* difference, and so one quality cannot come to be a *more*.” In other words, “the more by which *one* of the related moments would exceed the *other* would only be a groundless determination—this *more would again only be the [external] other itself*,” namely, the pure, unrelated distinction or indifference. According to Hegel, then, this is the source of the contradiction: (1) the determinate being of the two qualities depends on their equality; (2) yet, “their determinate being is based solely on the inequality of their quantum” (SL 460–1/450/378–9).

This so-called contradiction is either a deliberate sophistry or an indication of the fact that ordinary logic was not Hegel’s strong suit. It simply boils down to this: (1) two qualities depend on each other for their meaning and existence, and so are coextensive or equal in this sense; (2) this requires them to be also in a quantitative equilibrium (this is obviously a false requirement); and yet, (3) they are posited to be in a state of quantitative disequilibrium, one being more than the other. Thus the two quantitative modes of existence contradict both the logic and

existence of their respective qualities. Hegel is now to resolve this “contradiction” by declaring the relations it expresses untenable.

“Each of these supposed factors [qualities] vanishes,” regardless of “whether it is assumed to be *beyond* [or be more than] or *equal* to the other.” If the two forces were equal, then they would not be the moments of the elliptical motion in which they are posited, inversely, as unequal forces. On the other hand, when one quality is quantitatively more than the other, the latter is destroyed. In Hegel’s words, “one factor becomes preponderant as the other diminishes with an accelerated velocity and is overwhelmed by the first” (SL 461/450/379). This comment, once again, proves that Hegel’s present consideration derives from an unscientific understanding of the motions of celestial bodies.³

In Hegel’s lofty mind, it follows that the preponderant factor “makes itself the sole self-subsistent” factor or quality, thus making the other factor vanish. But since each factor cannot subsist without the other, it would also vanish by making the other vanish. Consequently, “there are no longer two specifics and factors but only the one whole” in which the untenable distinctions have vanished on their own accord (SL 461/450/379).

The totality we have just considered, which is “posited [by the scientists] as the totality of the process of determining ..., is the all-round contradiction” just described. Because of this, Hegel adds, it “has to be *posited as* this self-sublating contradiction,” which confusingly refers to the fact that the said contradiction has disappeared with the vanishing of the factors entailed in the said process of determining. As a result of this vanishing, the totality in question has collapsed into a simple, purely negative “unity,” “a for-itself-determined self-subsistent being, which ... is immanently negative and absolute in its self [*selbst*].” Such a negative unity is “essence” (SL 461/450/379). Even if we grant that the foregoing scenario describes an untenable all-round contradiction, the “posited” result still does not issue from it. Thus Hegel’s conclusion must be regarded as an external intervention.

In order to understand Hegel’s transition to essence, we must forget the fallacious and unscientific chain of reasoning that has brought Hegel to this point. The result we have reached is nothing more or less than a simple unity, which is “immanently negative.” We are supposed to call this unity “essence,” though Hegel has not yet explained why the result should be called essence. The ensuing section includes a faltering attempt to explain why essence issues from the said result.

TRANSITION INTO ESSENCE

In an obscure and repetitive manner, Hegel proceeds to describe how he has arrived at this stage. Subsequently, he reminds us that the result we now have “is the negative totality, whose determinacies have sublated [both] themselves in themselves ... [and] their one-sided ground, their being-in-itself,” namely the substrate. As a result of this self-sublation, the substrate is now “posited as ... the simple and infinite [absolute] negative self-relation,” and so no longer as the substrate as such (SL 467/456/384).

If so, neither “determining” nor “being determined is a transition” in this simple self-relation; nor is it an “external alteration” or “an *emergence*” of affirmatively distinct, self-standing “determinations in it.” These modes of determining are found in the sphere of being. Instead, what we have now is only the “self-relating” of the unity to its moments, to “the negativity of itself,” to the negativity “of its being-in-itself.” To say this differently, “such repelled determinations do not belong to themselves, [that is, they] do not emerge in [the form of] self-subsistence or externality, but [instead] are [the] moments [of this unity].” Thus, rather than “being expelled from it,” they are both “borne by” this unity and are “filled only by it.” It follows from this result that the unity and its moments are identical, for neither bears within itself what the other is not. Such a totality is an affirmative being-for-itself (*Fürsichseienden*) (SL 467–8/456/384). We find this mode of determining and being determined in the sphere of essence, and not in the sphere of being.

In short, what we have now is a totality of self-related moments, “the sole determination and significance of [which is] being related ... [in the] unity” itself; these moments are characterized only by “their relativity” (SL 468/457/384). This means that there is “no genuine other” in the sphere of essence; “everything is relational.” (For instance, “the positive makes no sense by itself; rather, it is strictly related to the negative.” In contrast, “in [the sphere of] Being, everything is immediate,” which means that every category is ultimately a self-standing being. In order to justify his present description of the relations in the sphere of being, Hegel claims that, “if we say ‘being’ and ‘nothing,’ then being is [or is comprehensible] by itself and nothing is by itself too” (EL 173–4).⁴

Let us be clear about the nature of Hegel’s transition. As far as I can tell, Hegel has not yet said anything about the fact that essence is the

ground of being, or is likewise the “inner” identity of its “outer” determinations.⁵ He has not said that “the conception which we have now reached” asserts “the duplicity of reality—its possession of an internal and external nature.”⁶ Nor has he said anything about the “two-tiered concept of Essence.”⁷ The transition into the sphere of essence depends solely on the emergence of what Hegel claims to be a different mode of determining than the one found in the sphere of being, and this is simply described as the sheer “relativity” of determinations.

It is easy to demonstrate that the transition into essence is unsound. In other words, it is not true that relatedness is not found in Hegel’s sphere of being. But, claims Hegel, “in the sphere of Being, relatedness is only *implicit*; in Essence, on the contrary, relatedness is [already] posited”—it is explicit (*EL* 174). Yet, and to give just one example, it was Hegel who insisted against Kant that neither one of the opposite categories, such as the finite and the infinite, “can be thought [or be] without the other” (*SL* 218/218/192).

It may be objected that “when something becomes other (in the sphere of Being) the something has thereby vanished, not so in [the sphere of] Essence.” In the latter, one something cannot vanish into another, for the being of one requires the presence of the other. For instance, the positive cannot vanish into the negative, and vice versa, since neither could exist, nor be grasped, apart from the other. Thus, “in the passing of ... [one] diverse [determination] into another ... [determination], the first one does not vanish; instead, both remain within this relation” (*EL* 173).

This attempt to distinguish the spheres of being and essence once again invalidates Hegel’s transition. In the last sentence of this section, with which he also concludes “The Doctrine of Being,” Hegel repeats that, as a result of its self-sublating, “the distinct determinatenesses” of being have “vanished,” as has the abstract “*being-in-itself*.” Consequently, “the initial self-subsistence and identity with itself” of the simple unity “is only the ... *infinite coalescence with itself*.” And “so is being determined to *essence*.” In a nutshell, essence is the self-sublating “simple *being with itself*” (*SL* 468/457/385).⁸ Thus the premise of the transition into essence simply rests on the vanishing of distinctions. If so, this premise cannot justify a sphere in which determining is characterized by the absence of vanishing. (By the way, it is not true that vanishing does not occur in Hegel’s doctrine of being.)

Apart from the issue of the legitimacy of the transition, it seems to me that Hegel has ultimately reduced the entire sphere of being to a simple immediacy or self-relation. Indeed, every major sphere of the entire sphere of being has been similarly reduced to such a self-relation. Thus, rather than building a system of being or a concrete whole, or even progressively advancing to more concrete determinations of being, Hegel seems to have reduced the whole sphere of being to an abstractly expressed mode of determining, to “the ... *infinite coalescence with itself*.” Indeed, a reconsideration of the three major categories (i.e., quality, quantity, and measure) Hegel has handled in the sphere of being would show that they are all reduced to this mode of determining, even though, especially in his various attempts to distinguish their mode of determination, Hegel has claimed otherwise.

We have one final issue to settle here. According to Hegel, the transition from the sphere of being to the category of essence *only* “appears to be an activity of cognition, external to being.” As it has been presumably shown, “this course is the [immanent] movement of being itself.” It is, therefore, “the nature of being to become essence” (*SL* 389).⁹ In my view, the said transition is entirely the result of Hegel’s “activity of cognition.” However, I must now leave it to the reader to decide whether or not being has become essence immanently through its own activity.

The idea that being is a self-determining dialectical whole, and that it can only be adequately grasped as such a whole, is quite appealing to me. However, I am convinced that Hegel’s attempt to demonstrate this logically and immanently is a philosophical blunder. Indeed, I am not even certain that the construction of such a concrete whole was Hegel’s main aim, though he does describe “The Doctrine of Being” as “a totality of determinations and a presentation of the Absolute” (*EL* 135).

On the whole, there is a massive discrepancy between what Hegel promises to deliver at the outset of *SL* and what he ends up delivering in its “First Book.” My negative assessment of “The Doctrine of Being” is mainly based on Hegel’s own standards, which I have already enumerated in the introduction to this book. To restate them in a general manner, Hegel’s doctrine of being is hardly a presuppositionless, immanent dialectic of being. Indeed, the whole doctrine is not only the product of Hegel’s own reflection, but is assertorically imposed, as a readymade solution, on the world of being he claims to construct logically. Relatedly, Hegel has failed to overcome the shortcomings he attributes to Kant and the older metaphysics, which was one of his main aims.

Whether or not this happens more convincingly in the rest of *SL* does not change the fact that a concerted but abortive effort has been made in “The Doctrine of Being” (“objective logic”) toward supplanting these philosophical traditions. Moreover, as it has been pointed out before, “many of the paradoxes Hegel needs in order to make his system work are based on shallow sophistries; the resolution to paradoxes supplied by his system is often artificial and unilluminating.”¹⁰

My main aim in this study has been to render “The Doctrine of Being” accessible to those who do not have enough time or patience to sort through its seemingly impenetrable language and chain of reasoning. Whether or not I have generally succeeded in this regard can only be determined by the readers themselves.

NOTES

1. The three page numbers included in the citation reference the following three texts: G. W. F. Hegel, *Wissenschaft der Logik. Erster Theil: Die Objektive Logik. Erste Abtheilung: Die Lehre Vom Seyn*, ed. Leopold Von Henning (Berlin: Duncker and Humblot, 1833) (Hegel 1833); G. W. Hegel, *Wissenschaft der Logik I. Erster Teil: Die Objektive Logik. Erstes Buch*, ed. Eva Moldenhauer und Karl M. Michel (Frankfurt am Main: Suhrkamp Verlag, 1969) (Hegel 1969); *Hegel's Science of Logic*, trans. A. V. Miller (Amherst, NY: Humanity Books, 1969) (Hegel 1969).
2. For a sound and accessible criticism of Hegel on this issue, see Olivier Deprè, “The Ontological Foundations of Hegel’s Dissertation of 1801,” in *Hegel and the Philosophy of Nature*, ed. Stephen Houlgate, 257–281 (Albany, NY: SUNY Press, 1998) (Deprè 1998). “Hegel could not accept what he [mistakenly] understood to be the Newtonian conception of inertia as an external force initiating motion, because following Kepler and Leibniz, he held that inertia is a tendency toward rest or, put negatively, is a *resistance* against the *natural* propensity of matter to move” (ibid., 272).
3. In the ensuing “Remark,” Hegel has this to say:

It takes only a little consideration to see that if, for example, as is alleged, the body’s centripetal force increases as it approaches perihelion, while the centrifugal force decreases proportionately, the latter *would no longer be able* to wrest the body away from the former and to set it again at a distance from its central body; on the contrary, for once the former has gained the upper hand, the other is overpowered and the body is carried towards its central body with accelerated velocity. Just as conversely,

if the centrifugal force gains the upper hand when infinitely near to aphe-
 lion, it is equally contradictory that now, in the aphe-
 lion itself, it should be overpowered by the weaker force. Further, it is evident that it would
 be an *alien* force which effected this reversal; and this means that this
 alternation of accelerated and retarded velocity of the motion *cannot be*
ascertained or, as it is said, *explained* from the assumed determination of
 the factors although these have been assumed for the express purpose of
 explaining this difference. The conclusion which follows from the vanish-
 ing of one or the other direction and hence of the elliptical motion alto-
 gether, is ignored and concealed because of the undeniable fact that this
 motion does go on and pass from the accelerated into the retarded veloc-
 ity (SL 463/452–3/380–1).

Hegel does not accept that an “*alien* force” is responsible for the vari-
 ation in the velocity of the orbiting body. Relatedly, and once again, he
 falsely assumes that centrifugal force is an actual force.

4. All quotations and citations from *EL* in this book are from G. W. F. Hegel, *The Encyclopaedia Logic: Part I of the Encyclopaedia of Philosophical Sciences with the Zusätze*, trans. T. F. Geraets et al. (Indianapolis, IN: Hackett, 1991) (Hegel 1991).
5. *Pace* Walter T. Stace, *The Philosophy of Hegel* (New York, NY: Dover, 1955), 176 (Stace 1955).
6. *Pace* John McTaggart, *A Commentary on Hegel's Logic* (Cambridge, UK: Cambridge University Press, 1910), 88 (McTaggart 1910).
7. *Pace* Charles Taylor, *Hegel* (Cambridge, UK: Cambridge University Press, 1977), 254–255 (Taylor 1977).
8. In *EL*, Hegel similarly maintains that, once “the immediacy of this unity has proven to be self-sublating,” it is “now *posited* as what it is *in itself*, as simple self-relation.” This simple self-relation is a unity in the sense that it “contains within itself being in general and its [distinct] forms as sublated.” As such a sublated totality, it is an immediate “relation to itself.” This “being or immediacy is *Essence*” (*EL* 173).
9. This citation is from the Miller translation of *SL*.
10. Allen W. Wood, *Hegel's Ethical Thought* (Cambridge, UK: Cambridge University Press, 1990), 4 (Wood 1990).

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INDEX

A

Absolute, [3](#), [12](#), [14](#), [15](#), [19](#), [48](#),
[60](#), [71](#), [72](#), [80](#), [82](#), [91](#), [94](#), [98](#),
[104](#), [108](#), [114](#), [122](#), [130](#), [132](#),
[139](#), [145](#), [149](#), [169](#), [180](#), [197](#),
[201–204](#), [206](#), [208](#), [211](#)
Abstract, [2](#), [10](#), [11](#), [13](#), [16](#), [18–20](#), [46](#),
[48](#), [52](#), [54](#), [56](#), [57](#), [61](#), [63](#), [68](#),
[71](#), [76](#), [78](#), [80](#), [83](#), [90–94](#), [97](#),
[106](#), [110](#), [112](#), [140](#), [142](#), [143](#),
[150](#), [174](#), [189](#), [194](#), [201](#), [203](#),
[210](#)
Abstraction, [10](#), [13](#), [48](#), [60](#), [61](#), [63](#),
[140–143](#), [203](#)
Activity, [4](#), [7](#), [12](#), [17](#), [18](#), [20](#), [61](#), [93](#),
[211](#)
Actual/Actuality, [5](#), [39](#), [69](#), [76–78](#),
[83](#), [84](#), [159](#), [205](#), [213](#)
Adorno, Theodor W., [1](#), [22](#), [30](#)
Affirmative, [39](#), [54](#), [56](#), [59](#), [69](#), [70](#),
[79](#), [80](#), [85](#), [89](#), [91–93](#), [95](#), [108](#),
[110](#), [115](#), [116](#), [143](#), [209](#)
Alteration, [58](#), [63](#), [65](#), [66](#), [90](#), [137](#),
[139](#), [145](#), [146](#), [158](#), [159](#), [162](#),
[172](#), [173](#), [175–179](#), [191–196](#), [209](#)

Alternation, [85](#), [87–90](#), [137](#), [148](#),
[160](#), [192–194](#), [213](#)
Ameriks, Karl, [25](#)
Amount, [9](#), [15](#), [20](#), [23](#), [27](#), [38](#), [39](#),
[41](#), [106](#), [114](#), [133](#), [138–145](#),
[151](#), [152](#), [156](#), [157](#), [159](#), [160](#),
[162](#), [174–178](#), [181](#), [185](#)
Antinomy(ies), [8](#), [80](#), [87](#), [88](#), [130](#), [131](#)
Antithesis, [4](#), [8](#), [88](#), [130](#)
Aphelion, [205](#), [206](#), [213](#)
Aristotle, [4](#), [173](#)
Arthur, Richard, [122](#)
Atomism/Automistic, [107](#), [121](#), [122](#),
[129](#)

B

Bacon, Francis (Baconian), [180](#)
Beginning, [8](#), [13](#), [16–21](#), [30](#), [37](#), [39](#),
[48](#), [89](#), [92](#), [120](#), [174](#), [183](#)
Being-for-other, [58–62](#), [65](#), [97](#), [104](#),
[114](#), [176](#)
Beiser, Frederick C., [23](#), [24](#), [27](#), [28](#)
Bell, John L., [153](#)
Bennett, Jonathan., [26](#)

Bolton, Martha B., 122
 Bristow, William F., 25
 Burbidge, John, 7, 22, 26, 47, 96–98, 197
 Butler, Clark, 22–24

C

Carlson, David G., 22, 23, 96, 98, 102, 121, 152, 153, 197
 Category(ies), 6, 13, 18, 25, 43, 59, 61, 68–71, 73–75, 80–83, 85, 89, 92, 95, 102–106, 108, 110, 113, 119–121, 133, 163, 174, 179, 180, 184, 190, 192, 194, 201, 205, 209, 211
 Cave, George P., 3, 48, 49
 Ceasing-to-be, 41, 44, 45, 67–69, 79
 Celestial bodies, 181, 182, 203, 208
 Centrifugal, 203–205, 212, 213
 Centripetal, 203–205, 212
 Chemistry/Chemical, 77, 172, 197
 Circle, 19, 20, 92, 107, 144
 Cognition, 5–8, 10, 20, 25, 68, 211
 Coming-to-be, 41, 44, 45
 Comparison, 57, 85, 115, 123, 140, 175, 191
 Concept, 4–6, 8, 9, 11–18, 20, 28, 29, 41, 51, 55, 60–62, 65, 66, 68, 73, 74, 76–85, 92–95, 102, 105–107, 110, 112, 117, 119, 123, 129–131, 133, 134, 137, 139, 140, 144–147, 149, 150, 152, 153, 160–163, 169–172, 174, 175, 179–183, 189, 193, 196, 201, 206, 210, 212
 Concrete, 9, 10, 12, 20, 21, 27, 41, 48, 52, 55, 61, 65, 73, 91, 92, 94, 130–132, 143, 145, 153, 169, 183, 184, 202, 205, 211
 Consciousness, 16, 17, 22, 24, 25, 28, 41, 48, 49, 72, 84, 91, 93, 97, 102, 173

Contradiction, 8–10, 12, 27, 37, 45, 49, 51, 52, 63, 68–73, 75, 83, 84, 87, 88, 111, 112, 114, 115, 131, 137, 139, 147–149, 153, 155, 156, 158, 159, 173, 174, 194, 195, 201, 206–208

Cosmology, 8, 9

D

Deficiency, 74, 91, 96, 155–158
 Degree, 137, 142–146, 150, 152, 153
 Density, 184, 190, 191, 197
 Deprè, Olivier, 212
 Descartes, René, 13
 Destiny, 61, 62, 70, 71, 73, 75
 Dialectic (dialectical), 8–12, 15, 17, 18, 21–24, 26–30, 42, 46, 48, 49, 51, 52, 54, 56–60, 76, 88, 93, 99, 102, 106, 108, 109, 111, 119, 123, 129, 130, 151, 158, 184, 192, 206, 211
 Discrete (discreteness), 129–133, 138, 140–144, 193
 Double negation, 57, 59, 87, 151, 195
 Double transition, 163, 180, 182, 184
 Dualism (dualistic), 15, 98
 Duffy, Simon, 96, 153

E

Ego, 14, 94, 104, 130
Elenchi, 173, 185
 Elliptical orbit, 203, 205, 208, 213
 Empiricism (empiricist), 7, 8, 84, 97
 Emptiness (empty), 38, 40, 48, 108
 Epicurean, 8
 Essence, 3, 5, 7, 62, 84, 92, 113, 121, 122, 130, 170, 195, 201, 208–211, 213
 Essential, 4, 11, 15, 18, 19, 26, 58, 59, 61, 66–69, 73–75, 79, 87,

90, 92–95, 105, 109, 118, 120, 129, 130, 133, 137–139, 141, 144, 151, 163, 170, 180, 182, 192, 195, 203, 206

Eternal, 71, 72, 94

Exclusion (excluded), 74, 81, 83, 97, 113–115, 123, 143, 144, 202

Existential, 70, 83, 84, 95, 114, 117, 141

Experience, 5, 6, 13, 14, 25, 97

Explication, 83, 111, 120, 183

Exposition, 13, 20, 43, 134

External (externality), 6, 7, 12, 14, 42, 44, 46, 52, 55, 57, 59, 60, 62, 64–66, 68, 73, 74, 80–82, 85, 86, 88, 90, 95, 97, 110–115, 122, 123, 130, 132, 133, 138–146, 150, 155, 156, 160, 161, 163, 170, 172, 175–178, 181, 183, 189, 190, 192–194, 196, 197, 202, 203, 205–212

F

Feuerbach, Ludwig, 21, 30, 38, 47

Fichte, Johann G., 13–15, 28

Filling, 62, 64, 74, 118

Findlay, John F., 23, 25, 134, 146, 153, 155, 164, 185

Formal logic, 9, 10

Forster, Michael, 23, 83, 169

Freedom, 14, 22, 25, 27, 29, 81, 98

G

Gadamer, Hans-Georg, 29, 49, 93, 99

Galileo Galilei, 180–182

Giovanni, George Di, 3, 14, 24, 28, 48

God, 22, 25, 81, 98, 104, 105, 112, 113, 121, 169

Gradual, 173, 193

Ground, 4, 6, 11, 14, 16, 19, 41, 42, 52, 53, 55, 84, 93–95, 113, 122, 130, 195, 209, 210

Guyer, Paul, 25, 27, 97, 134

Guzman, Luis, 22

H

Halper, Edward, 186

Harris, Errol E., 22, 96, 102, 121, 164, 185, 198

Harris, Henry S., 28

Hartmann, Klaus, 21, 30

Hartnack, Justus, 1, 22, 123, 152

Heat capacity, 176–178, 186

Henrich, Dieter, 25

History of philosophy, 1, 11, 16, 26–28, 99, 122, 123, 185

Hölderlin, Friedrich, 2, 29

Houlgate, Stephen, 1–3, 9, 18, 21, 22, 24, 27, 29, 30, 39, 47–49, 53, 55, 78, 86, 95–99, 186, 198, 212

Hume, David, 6, 7

Hyppolite, Jean, 24, 30

I

Idea, 7–12, 19, 22, 29, 30, 37, 47, 49, 56, 66, 78, 86, 95, 98, 101, 138, 144, 149, 153, 154, 158, 170, 171, 174, 193, 203, 211

Ideal (ideality), 15, 92–95, 101, 104, 105, 112, 114, 117, 118, 153, 154, 181

Idealism, 22–25, 28, 48, 49, 93, 94, 96, 112, 114

Identity, 4, 7, 8, 10, 12, 14–17, 26–28, 40, 51, 55, 58, 60, 61, 63–65, 77, 79, 87, 92, 101, 106, 108, 109, 115, 116, 118, 131, 132, 139, 143, 145, 152, 153, 159, 171, 172, 195, 205, 210

Immanent, 5, 12, 13, 15, 17–20, 27, 30, 42, 43, 46, 49, 51–57, 64–66, 69, 70, 73, 76–78, 93, 98, 110, 111, 129, 139, 147, 160, 175–179, 183, 185, 190, 196, 203, 204, 206, 208, 211

Immediate (immediacy), 6, 14–16, 18–20, 42–44, 48, 51–53, 55, 59, 66, 72, 81, 82, 95, 101, 107–109, 111, 112, 118, 120, 123, 132, 140, 155, 157, 160–162, 171, 177, 182–184, 190, 195, 196, 206, 209, 213

Indifference (indifferent), 2, 14, 15, 47, 63, 139, 156, 181, 192, 197, 201–207

Instinct, 78

Internal, 59, 65, 66, 75, 87, 118, 141, 151, 152, 154, 156, 160, 180, 182, 202, 210

Intuit (intuition), 38, 40, 97

Inwardness (inner), 74

Inwood, Michael, 25, 83, 98, 169, 185

K

Kant, Immanuel, 25, 26, 97, 98

Kepler, Johannes, 180–182, 212

Kierkegaard, Søren, 2, 18, 23, 29

Kojève, Alexandre, 10, 27

Krug's pen, 68

L

Lauer, S.J. Quentin, 21

Leap, 45, 139, 173, 184, 193, 194, 198, 203, 205

Leibniz, Gottfried W., 111–114, 122, 123, 130, 134, 193, 198

Life, 78, 93, 94, 114, 198

Logical, 2, 4, 6–12, 15, 17, 19, 20, 23, 25, 26, 29, 30, 37, 39, 40,

49, 55, 60, 66, 68, 70, 72, 75, 76, 80, 84–86, 88, 91, 92, 95, 101, 104, 105, 109, 111, 114, 116, 117, 123, 130–132, 145, 149, 170, 171, 179–181, 190, 192, 193, 196, 197, 204, 211

Longuenesse, Beatrice, 25

M

Maker, William, 29

Man (human), 5, 16, 25, 62, 78

Marcuse, Herbert, 17, 29, 39, 47, 97, 98

Mathematics (mathematical), 124, 129, 147, 153, 159, 170, 179, 180, 185

Matter (material, materiality), 2–4, 14, 16, 20, 24, 47, 86, 88, 94, 105, 113, 116, 117, 119, 122, 123, 130, 132, 146, 153, 171, 175, 176, 181, 184–186, 189–192, 195–197, 205, 212

McCumber, John, 26

McTaggart, John, 22, 24, 27, 39, 47, 49, 105, 107, 108, 115, 121, 123, 131, 134, 141, 152, 153, 157, 161, 164, 174, 185, 198, 213

Mediation (mediated), 16, 17, 19, 20, 46, 48, 52, 55, 61, 64, 78, 97, 118, 119, 202, 206

Megarics, 173

Melamed, Yitzhak Y., 96

Mercer, Christia, 122

Metaphysics, 1, 4–10, 12, 24–26, 98, 131, 197, 211

Method, 2, 13, 20, 23, 24, 163, 180

Middle term, 63

Moment(s), 5, 9, 11, 41–46, 49, 52, 54–56, 58–61, 63, 65, 68, 73, 74, 79, 85–87, 90, 92, 94, 96,

99, 102–109, 114, 118–120,
130, 132, 138, 139, 144,
147, 151, 157–162, 174, 177,
181–184, 194, 195, 201, 206,
207, 209
Monad(s), 111–114, 130
Motion, 16, 171, 180–182, 184, 203,
205, 208, 212, 213
Multiplicity, 61, 101, 111, 112, 122,
133, 140, 162, 190
Mure, Geoffrey R.G., 22, 24, 93, 99,
131, 134, 152

N

Necessity, 6, 8, 14, 16, 23, 55, 70, 73,
75, 96, 98, 117, 145, 146, 149,
151, 163, 180
Newton, Isaac (Newtonian), 180, 212
Noumenon, 5

O

Object, 4–7, 9–11, 14–18, 25, 28, 41,
55, 61, 62, 76–78, 81, 97, 153,
172, 193, 210
Objective, 4–9, 13–15, 67, 212
Observation, 39, 70, 77, 78, 117,
134, 141, 149, 156, 170, 172,
178, 190, 191, 197
Ontology, 4, 5, 7, 17, 70
Opinion, 43, 72
Opposite(s), 8, 9, 11, 12, 15, 42, 44,
67, 71, 72, 76, 86, 88, 93, 116,
130, 140, 151, 160, 173, 193,
202, 210
Organic, 12, 93

P

Particular, 1, 4, 28, 46, 53, 76, 83, 98,
113, 169, 178

Passive (philosophy), 1, 6, 7, 9,
11–19, 21–30, 41, 47, 72, 75,
94, 112, 122, 124, 153, 164,
170, 180, 186, 197
Paton, Herbert, 5, 25
Perihelion, 205, 206, 212
Perish (perishing), 69–73, 172, 194
Perpetual, 101, 117, 118, 120, 129,
130, 148, 149
Phenomenology (phenomenological),
16, 17, 124, 153
Phenomenon, 5, 178
Pictorial thinking, 92, 99
Pinkard, Terry, 24, 123, 124, 153
Pippin, Robert B., 1, 2, 22–25, 48, 49
Plato (Platonic), 8, 40, 48, 57, 96, 97,
113, 122, 123
Plurality, 111–114, 123, 138, 140–144
Popper, Karl, 21
Positive, 1, 8, 10–12, 23, 115, 148,
209, 210
A posteriori, 6
Predicate (predication), 39, 41, 47,
82, 83
Presuppose, 2, 7, 13–17, 19–21, 43,
48, 52, 57, 59, 62, 78, 93, 97,
103, 111, 116–119, 122, 132,
144, 153, 164, 169, 172, 176,
195
Presupposition, 5, 14, 17, 19, 20, 38,
58, 75, 104, 116, 119, 122, 132,
169, 204
Presuppositionless, 3, 12, 15, 16, 20,
21, 27, 37, 56, 62, 93, 211
Principle, 10, 13–15, 27, 28, 64, 94,
114, 121, 122, 133, 138, 170,
180, 192, 196
A priori, 5–7, 25
Privation, 74, 96
Process, 16, 28, 44, 62, 63, 67,
68, 73, 77, 80, 87–89, 91–93,
99, 101, 108, 111, 116, 117,

119, 120, 123, 143, 160, 189,
195–197, 202, 208

Protagoras, 114

Pulse (life-pulse), 94, 110, 114

R

Rational, 1, 8, 10, 11, 13, 14, 49, 95

Reason, 2, 3, 6–11, 14, 15, 17–20,
24–27, 29, 37, 39–43, 45–47,
55, 57, 58, 62–64, 68, 70–72,
76, 77, 80, 81, 83, 85, 86, 93,
97, 98, 104–106, 108, 110, 113,
114, 116, 117, 120, 122, 131–
134, 137, 139, 140, 142, 143,
145, 147, 148, 152, 156–158,
161, 163, 164, 169, 173, 174,
178, 179, 190, 191, 193, 194,
203, 204, 208, 212

Reflection (reflect, reflected), 11,
12, 15–20, 41, 46, 52, 53, 55,
57–59, 61, 66, 68, 73, 80, 87,
88, 93, 97, 102, 108, 110, 111,
114, 115, 133, 138, 181, 211

Relation (relational, relationship), 3,
10, 11, 16, 24, 28, 43, 44, 57–
60, 62, 64–66, 68, 69, 74–76, 78,
79, 82, 83, 86, 90, 93, 97, 103,
107, 109–114, 118, 119, 133,
137, 141, 142, 144, 151, 152,
156–158, 160, 161, 163, 171,
175–177, 179–184, 189, 190,
192–194, 201–207, 210, 213

Representation (representational), 6,
8, 78, 94, 95, 102, 117, 132,
148, 181, 185

Rinaldi, Giacomo, 55, 96

Rosen, Michael, 24, 47

Rosen, Stanley, 21, 22, 47, 49, 98,
153

Ruschig, Ulrich, 197

Russell, Bertrand, 21

S

Schelling, Friedrich, 2, 13–15, 18, 21,
23, 28, 29

Science, 1–5, 13, 14, 16, 19, 20, 41,
169, 170, 172, 179, 180, 204

Sedgwick, Sally, 25

Self-development, 12, 20

Self-relation, 59, 65, 74, 86, 93, 107,
144, 152, 155, 161, 182, 192,
209, 211, 213

Self-subsistence, 86, 119, 184, 203,
209, 210

Self-subsistent, 112, 118, 183, 184,
189, 190, 192, 195, 196, 208

Sensation, 6, 77, 78

Skepticism, 7, 15, 84

Smith, Norman K., 26

Soul, 12, 94, 113, 145

Space, 3, 88, 130, 132, 171, 180–184,
189, 190

Sparby, Terje, 95

Specific gravity, 190, 191

Speculative, 2, 10–12, 18, 46, 66,
115, 118, 141, 169, 179, 180

Spinoza, Benedict de., 129

Spirit, 5, 7, 16, 18, 77, 78, 81, 93, 94,
102, 104

Spurious, 80, 82, 84, 85, 137, 149,
150, 159, 192

Stace, Walter T., 39, 133

Subject, 3, 12–15, 17, 18, 105, 106,
129, 130, 193, 196, 197, 206

Subjective, 4–9, 12–15, 18, 43, 78,
81, 94, 95, 111

Subjective idealism, 15, 18, 94, 95

Subsistence, 43, 86, 119, 161, 184,
203, 209, 210

Substance, 113, 122, 130, 172, 176,
185, 189, 191, 192, 206

Substrate, 153, 189, 192, 195–197,
201–206, 209

Syllogism, 63

Synthesis, 6

System, 3, 4, 10, 12, 14, 15, 17, 21,
24, 28–30, 37, 114, 122, 146,
153, 211, 212

T

Taylor, Charles, 23, 24, 46, 47, 49,
68, 70, 96, 98, 105, 121, 123,
153, 169, 185

Temperature, 170, 176–178

Thesis, 8, 88, 130

Thing-in-itself, 8, 9, 60, 84, 97

Time, 1, 7, 11–13, 27, 44–46, 54, 64,
71, 74–76, 81, 86, 88, 102, 118,
120, 123, 130, 132, 133, 142,
144, 158, 161, 164, 170, 171,
173, 178, 180–186, 189, 192,
194, 207, 212

Totality, 3, 4, 11, 67, 78, 161–163,
170, 180, 182, 184, 208, 209,
211

Transcendental, 6, 8, 13, 25, 26, 28,
29, 61

Transcendental illusion, 8

Transition, 12, 15, 42, 44, 45, 48,
49, 65, 66, 69, 70, 73, 75, 79,
92, 96, 107, 110, 116, 119, 120,
123, 134, 151, 152, 155, 157,
160, 161, 163, 164, 170, 174,
175, 179, 180, 182, 184, 186,
192, 193, 195, 196, 198, 201,
208–211

Transitory (transitoriness), 69, 71, 72,
86

Trendelenburg, Friedrich A., 30

Triadic, 12, 41, 60, 70, 80

Truth, 4, 5, 7, 9, 10, 12, 14, 15, 17,
27, 42, 53, 69, 82, 85, 90, 92,
94, 95, 123, 130, 150, 161–163,
169, 174, 184

U

Understanding, 6, 9, 10, 18, 52, 60,
63–66, 69–72, 76–78, 80–85,
91, 93, 109, 111, 113, 138, 178,
182, 208

Unit, 138, 139, 141, 156–158,
160–162, 181

Unity, 5, 6, 9–11, 15, 21, 37, 41–46,
51–53, 55, 56, 59–61, 63, 73,
79, 85–88, 103, 106, 109, 112,
113, 115, 118–120, 129–133,
151, 155, 156, 158, 160, 171,
181, 184, 195, 196, 201, 202,
204–210

Universal, 1, 4, 5, 7, 15, 53, 60, 76,
83, 84, 203

V

Vanish (vanishing), 37, 42, 45, 51, 52,
66, 91, 108, 110, 114, 120, 142,
201, 202, 208, 210

Vantage point, 63

Velocity, 181, 182, 205, 208

W

Wallace, Robert M., 22, 25, 98

Weight, 153, 184, 190, 191

Willett, Cynthia, 48

Winfield, Richard D., 22, 24, 97, 122,
146, 153, 186

Wood, Allen W., 21, 25, 97, 134, 213

Z

Zeno, 64, 114